



No.I23Z60833-SEM05



SAR TEST REPORT

No. I23Z60833-SEM05

For

Wingtech Group (Hong Kong) Limited

5G Tablet

Model Name: TMRV5GTB

with

Hardware Version: V1.1

Software Version: REVVLTAB5G_0.01.01

FCC ID: 2APXW-TMRV5GTB

Issued Date: 2023-7-5

Note:

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REPORT HISTORY

Report Number	Revision	Issue Date	Description
I23Z60833-SEM05	Rev.0	2023-6-28	Initial creation of test report
I23Z60833-SEM05	Rev.1	2023-7-4	<ol style="list-style-type: none">1. Change the Equipment Class from PCB to PCT on page6.2. Add tune up power for GSM 850 EGPRS(8PSK) 4TX slots on page27.3. Revise Tune up power of WCDMA HSUPA, HSPA+, HSDPA power level A1/B1/C1 on page31-35.4. Add spot check results for LTE ULCA 7C and 41C on page 180-181.
I23Z60833-SEM05	Rev.2	2023-7-5	<ol style="list-style-type: none">1. Add Note4 for LTE ULCA 7C and 41C on page 180-181.2. Remove SAR results for ENDC B2-n25 on page173.

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1 Test Laboratory

1.1 Testing Location

Company Name:	CTTL
Address:	No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China 100191.

1.2 Testing Environment

Temperature:	18°C~25°C,
Relative humidity:	30%~ 70%
Ground system resistance:	< 0.5 Ω
Ambient noise & Reflection:	< 0.012 W/kg

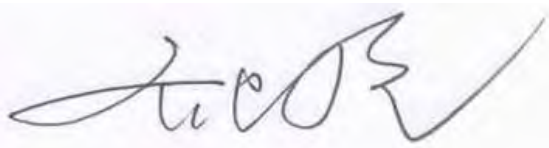
1.3 Project Data

Project Leader:	Qi Dianyuan
Test Engineer:	Yao Juming
Testing Start Date:	May 19, 2023
Testing End Date:	June 20, 2023

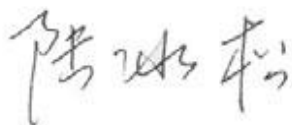
1.4 Signature



Yao Juming
(Prepared this test report)



Qi Dianyuan
(Reviewed this test report)



Lu Bingsong
Deputy Director of the laboratory
(Approved this test report)

2 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Wingtech Group (Hong Kong) Limited 5G Tablet TMRV5GTB are as follows:

Table 2.1: Highest Reported SAR (1g)

Technology Band	Body SAR 1g (W/kg)	Equipment Class
GSM850	1.32	PCT
GSM1900	1.13	
WCDMA1900	1.16	
WCDMA1700	1.19	
WCDMA 850	1.04	
LTE Band2-ANT1	1.42	
LTE B7	0.73	
LTE B12	0.71	
LTE B13	1.21	
LTE B25	1.19	
LTE B26	1.03	
LTE B41 PC3	0.80	
LTE B41 PC2	1.23	
LTE B66-ANT3	1.35	
LTE B71	1.23	
5G NR n7	0.79	
5G NR n25	1.18	
5G NR n41	1.27	
5G NR n66	1.11	
5G NR n71	1.39	
5G NR n77	1.36	
5G NR n78	1.29	
WLAN 2.4GHz	1.39	DTS
WLAN 5GHz	1.03	NII
BT	0.45	DSS

The SAR values found for the Mobile Phone are below the maximum recommended levels of 1.6 W/kg as averaged over any 1g tissue according to the ANSI C95.1-1992.

For body operation, this device has been tested and meets FCC RF exposure guidelines when used with any accessory that contains no metal and which provides a minimum separation distance of 0mm/15mm/20mm between this device and the body of the user. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power output.

The measurement together with the test system set-up is described in annex C of this test report. A detailed description of the equipment under test can be found in chapter 4 of this test report. The highest reported SAR value is obtained at the case of **(Table 2.1)**, and the values are:

Body: 1.42 W/kg(1g)

Remark:

This device supports both LTE B4/B5/B17 and LTE B66/B26/B12. Since the supported frequency span for LTE B4/B5/B17 falls completely within the supported frequency span for LTE B66/B26/B12, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B66/B26/B12.

Table 2.2: The sum of SAR values for Main antenna + WIFI

	Position	Main antenna	WiFi	Sum
Highest SAR value for Body	Rear 5mm	0.81 (N41)	0.77 (WIFI2.4G)	1.58

According to the above tables, the highest sum of reported SAR values is **1.58 W/kg (1g)**. The detail for simultaneous transmission consideration is described in chapter 13.

Conclusion:

According to the above tables, the sum of reported SAR values is $< 1.6 \text{ W/kg}$. So the simultaneous transmission SAR with volume scans is not required.

3 Client Information

3.1 Applicant Information

Company Name:	Wingtech Group (Hong Kong) Limited
Address/Post:	Flat/RM 1903 19/F, Podium Plaza, 5 Hanoi Road, Tsim Sha Tsui, KL, HK
Contact Person:	sharui
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3.2 Manufacturer Information

Company Name:	Wingtech Group (Hong Kong) Limited
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Contact Person:	sharui
Contact Email:	sharui@wingtech.com
Telephone:	+86-21-53529900

4 Equipment Under Test (EUT) and Ancillary Equipment (AE)

4.1 About EUT

Description:	5G Tablet
Model name:	TMRV5GTB
Operating mode(s):	GSM850/900/1800/1900, WCDMA850/900/1700/1900/2100 LTE Band1/2/3/4/5/7/8/12/13/17/20/25/26/28/38/39/40/41/66/71, 5G NR n1/n3/n7/n25/n28/n38/n41/n66/n71/n77/n78 BT, Wi-Fi(2.4G&5G)
Tested Tx Frequency:	824 – 849 MHz (GSM 850)
	1850 – 1910 MHz (GSM 1900)
	824 – 849 MHz (WCDMA 850 Band V)
	1850 – 1910 MHz (WCDMA1900 Band IV)
	1710-1755 MHz (WCDMA1700 Band II)
	1850 – 1910 MHz (LTE Band 2)
	2500 – 2570 MHz (LTE Band 7)
	699 – 716 MHz (LTE Band 12)
	777 –787 MHz (LTE Band 13)
	1850 – 1910 MHz (LTE Band 25)
	814 – 849 MHz (LTE Band 26)
	2496 – 2690 MHz (LTE Band41)
	1710 –1780 MHz (LTE Band 66)
	663 –698 MHz (LTE Band 71)
	2500 – 2570 MHz (n7)
	1850 – 1915 MHz (n25)
	2496 – 2690 MHz (n41)
	1710– 1780 MHz (n66)
	663– 698 MHz (n71)
	3450 – 3550 MHz (n77L)
	3700 – 4200 MHz (n77H)
	3450 – 3550 MHz (n78L)
	3700 – 3800 MHz (n78H)
2412 – 2462 MHz (Wi-Fi 2.4G)	
2400 – 2483.5 MHz (Bluetooth)	
5180 – 5240 MHz (Wi-Fi 5.2G)	
5260 – 5320 MHz (Wi-Fi 5.3G)	
5500 – 5720 MHz (Wi-Fi 5.5G)	
5745 – 5825 MHz (Wi-Fi 5.8G)	
GPRS/EGPRS Multislot Class:	12
Test device production information:	Production unit
Device type:	Portable device
Antenna type:	Integrated antenna
Hotspot mode:	Support

4.2 Internal Identification of EUT used during the test

EUT ID*	IMEI/SN	HW Version	SW Version
EUT1	864182060001402	V1.1	REVVLTA5G_0.01.01
EUT2	864182060001147	V1.1	REVVLTA5G_0.01.01
EUT3	864182060001329	V1.1	REVVLTA5G_0.01.01
EUT4	864182060001741	V1.1	REVVLTA5G_0.01.01
EUT5	864182060001220	V1.1	REVVLTA5G_0.01.01
EUT6	864182060009108	V1.1	REVVLTA5G_0.01.01
EUT7	864182060001246	V1.1	REVVLTA5G_0.01.01
EUT8	864182060000065	V1.1	REVVLTA5G_0.01.01
EUT9	864182060000800	V1.1	REVVLTA5G_0.01.01
EUT10	864182060000040	V1.1	REVVLTA5G_0.01.01
EUT11	864182060013464	V1.1	REVVLTA5G_0.01.01
EUT12	864182060000305	V1.1	REVVLTA5G_0.01.01

*EUT ID: is used to identify the test sample in the lab internally.

Note: It is performed to test SAR with the EUT1~7 and conducted power with the EUT8~12.

4.3 Internal Identification of AE used during the test

AE ID*	Description	Model	SN	Manufacturer
AE1	Battery	SGA35	/	SCUD

*AE ID: is used to identify the test sample in the lab internally.

5 TEST METHODOLOGY

5.1 Applicable Limit Regulations

ANSI C95.1–1992:IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

It specifies the maximum exposure limit of **1.6 W/kg** as averaged over any 1 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment.

5.2 Applicable Measurement Standards

IEEE 1528–2013: Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques.

KDB447498 D01: General RF Exposure Guidance v06: Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.

KDB616217 D04 SAR for laptop and tablets v01r02 SAR Evaluation Considerations for Laptop, Notebook, Notebook and Tablet Computers.

KDB648474 D04 Handset SAR v01r03: SAR Evaluation Considerations for Wireless Handsets.

KDB941225 D01 SAR test for 3G devices v03r01: SAR Measurement Procedures for 3G Devices

KDB941225 D05 SAR for LTE Devices v02r05: SAR Evaluation Considerations for LTE Devices

KDB941225 D06 Hotspot Mode SAR v02r01: SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities

KDB248227 D01 802.11 Wi-Fi SAR v02r02: SAR GUIDANCE FOR IEEE 802.11 (Wi-Fi) TRANSMITTERS

KDB865664 D01 SAR measurement 100 MHz to 6 GHz v01r04: SAR Measurement Requirements for 100 MHz to 6 GHz.

KDB865664 D02 RF Exposure Reporting v01r02: RF Exposure Compliance Reporting and Documentation Considerations

6 Specific Absorption Rate (SAR)

6.1 Introduction

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

6.2 SAR Definition

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

$$SAR = \frac{d}{dt} \left(\frac{dW}{dm} \right) = \frac{d}{dt} \left(\frac{dW}{\rho dv} \right)$$

SAR is expressed in units of Watts per kilogram (W/kg)

SAR measurement can be either related to the temperature elevation in tissue by

$$SAR = c \left(\frac{\delta T}{\delta t} \right)$$

Where: C is the specific heat capacity, δT is the temperature rise and δt is the exposure duration, or related to the electrical field in the tissue by

$$SAR = \frac{\sigma |E|^2}{\rho}$$

Where: σ is the conductivity of the tissue, ρ is the mass density of tissue and E is the RMS electrical field strength.

However for evaluating SAR of low power transmitter, electrical field measurement is typically applied.

7 Tissue Simulating Liquids

7.1 Targets for tissue simulating liquid

Table 7.1: Targets for tissue simulating liquid

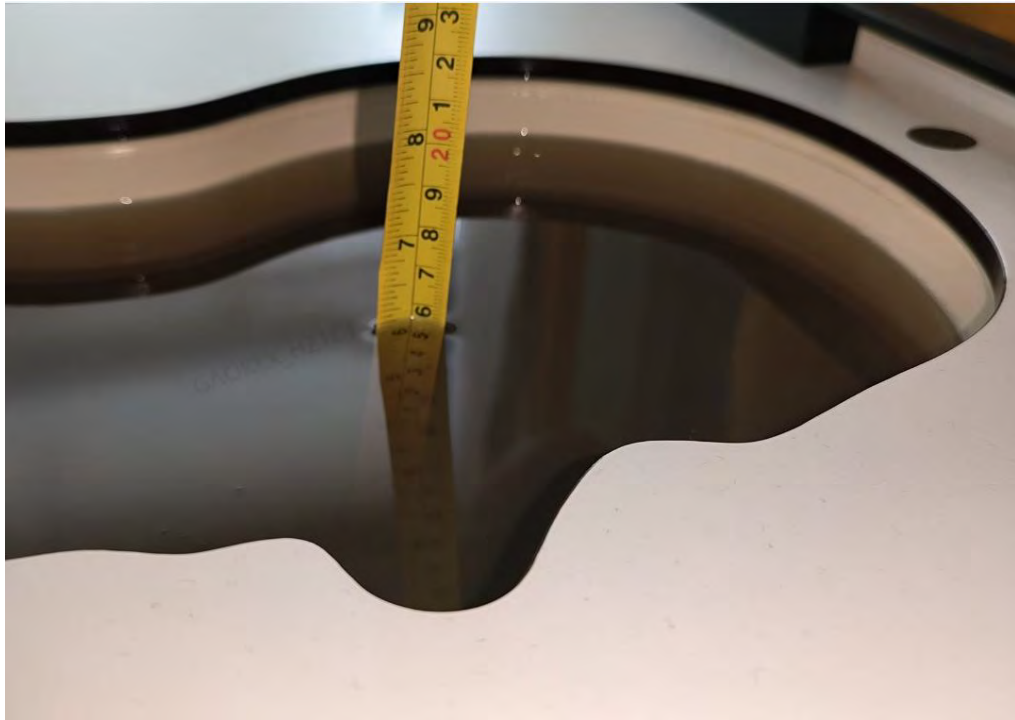
Frequency(MHz)	Liquid Type	Conductivity(σ)	$\pm 5\%$ Range	Permittivity(ϵ)	$\pm 5\%$ Range
750	Head	0.89	0.85~0.93	41.94	39.8~44.0
900	Head	0.97	0.92~1.02	41.50	39.40~43.60
1800	Head	1.40	1.33~1.47	40.00	38.00~42.00
1900	Head	1.40	1.33~1.47	40.00	38.00~42.00
2300	Head	1.67	1.50~1.84	39.47	37.5~41.4
2450	Head	1.80	1.71~1.89	39.20	37.30~41.10
2600	Head	1.96	1.86~2.06	39.01	37.06~40.96
3300	Head	2.71	2.57~2.85	38.2	36.29~40.11
3500	Head	2.91	2.76~3.06	37.93	36.03~39.83
3700	Head	3.22	3.06~3.38	37.6	35.72~39.48
5250	Head	4.71	4.47~4.95	35.93	34.13~37.73
5600	Head	5.07	4.82~5.32	35.53	33.8~37.3
5750	Head	5.22	4.96~5.48	35.36	33.59~37.13

7.2 Dielectric Performance

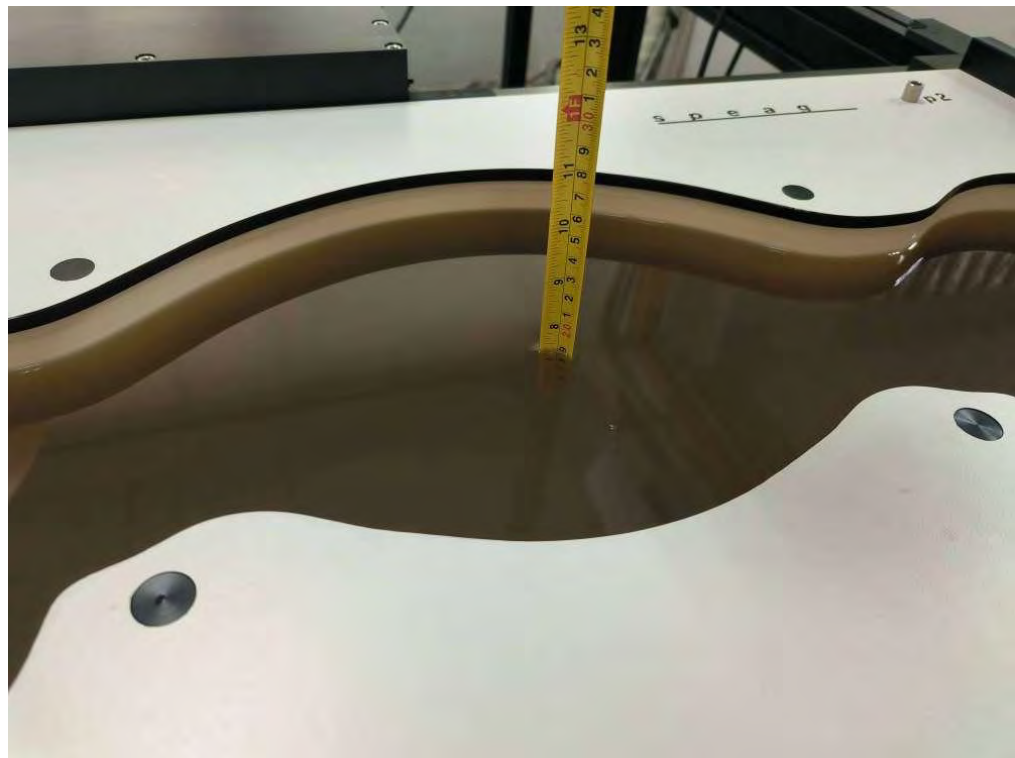
Table 7.2: Dielectric Performance of Tissue Simulating Liquid

Measurement Date (yyyy-mm-dd)	Type	Frequency	Permittivity ϵ	Drift (%)	Conductivity σ (S/m)	Drift (%)
2023-6-10	Head	750 MHz	40.642	-3.09	0.911	2.36
2023-5-19	Head	900 MHz	40.431	-2.58	0.953	-1.75
2023-5-21	Head	1800 MHz	40.267	0.67	1.37	-2.14
2023-5-23	Head	1800 MHz	39.64	-0.90	1.381	-1.36
2023-5-26	Head	1900 MHz	40.231	0.58	1.354	-3.29
2023-5-28	Head	1900 MHz	39.844	-0.39	1.367	-2.36
2023-6-12	Head	2450 MHz	40.345	2.92	1.774	-1.44
2023-6-2	Head	2600 MHz	38.37	-1.64	1.974	0.71
2023-6-4	Head	2600 MHz	40.037	2.63	1.986	1.33
2023-6-14	Head	3300 MHz	38.424	0.69	2.713	0.11
2023-6-14	Head	3500 MHz	37.652	-0.73	2.833	-2.65
2023-6-15	Head	3700 MHz	37.785	0.23	3.128	0.26
2023-6-16	Head	3900 MHz	37.752	0.75	3.27	-1.51
2023-6-16	Head	4100 MHz	37.654	1.11	3.495	-0.99
2023-6-18	Head	5250 MHz	35.68	-0.70	4.685	-0.53
2023-6-19	Head	5600 MHz	35.863	0.94	4.941	-2.54
2023-6-20	Head	5750 MHz	35.923	1.59	5.127	-1.78

Note: The liquid temperature is 22.0°C



Picture 7-1 Liquid depth in the Head Phantom

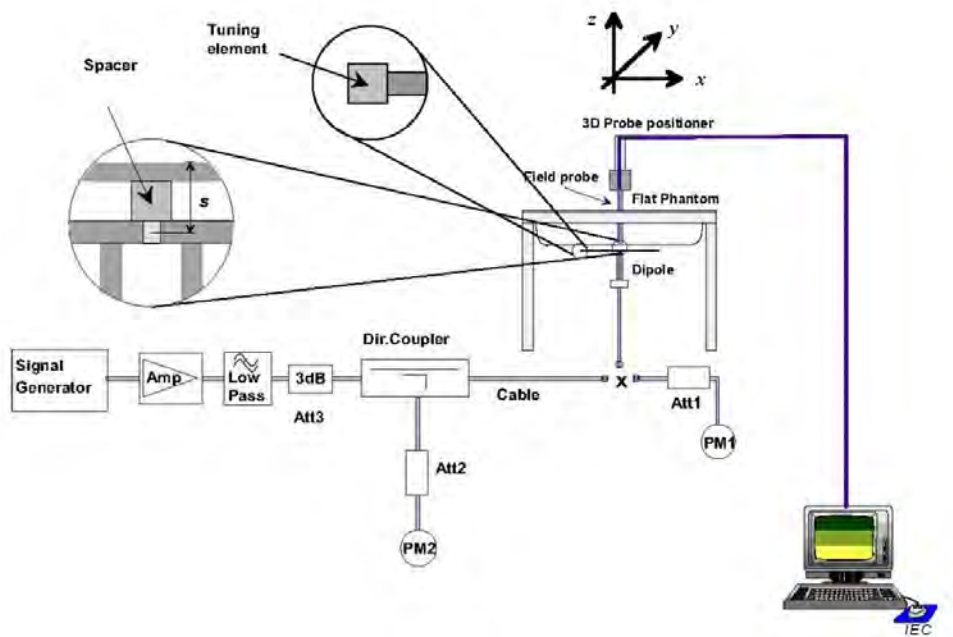


Picture 7-2 Liquid depth in the Flat Phantom

8 System verification

8.1 System Setup

In the simplified setup for system evaluation, the DUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave that comes from a signal generator. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The equipment setup is shown below:



Picture 8.1 System Setup for System Evaluation



Picture 8.2 Photo of Dipole Setup

8.2 System Verification

SAR system verification is required to confirm measurement accuracy, according to the tissue dielectric media, probe calibration points and other system operating parameters required for measuring the SAR of a test device. The system verification must be performed for each frequency band and within the valid range of each probe calibration point required for testing the device.

The system verification results are required that the area scan estimated 1-g SAR is within 3% of the zoom scan 1-g SAR. The details are presented in annex B.

Table 8.1: System Verification of Head

Measurement Date (yyyy-mm-dd)	Frequency	Target value (W/kg)		Measured value(W/kg)		Deviation	
		10 g Average	1 g Average	10 g Average	1 g Average	10 g Average	1 g Average
2023-6-10	750 MHz	5.64	8.63	5.48	8.48	-2.84%	-1.74%
2023-5-19	900 MHz	7.05	11	6.96	10.92	-1.28%	-0.73%
2023-5-21	1800 MHz	20.2	38.8	20.44	39.24	1.19%	1.13%
2023-5-23	1800 MHz	20.2	38.8	20.6	39.48	1.98%	1.75%
2023-5-26	1900 MHz	20.7	39.7	20.44	39.24	-1.26%	-1.16%
2023-5-28	1900 MHz	20.7	39.7	20.84	39.92	0.68%	0.55%
2023-6-12	2450 MHz	24.9	52.7	25.16	53.64	1.04%	1.78%
2023-6-2	2600 MHz	25.2	55.8	24.96	55.48	-0.95%	-0.57%
2023-6-4	2600 MHz	25.2	55.8	25.36	55.92	0.63%	0.22%
2023-6-14	3300 MHz	25	65.3	24.3	64.3	-2.80%	-1.53%
2023-6-14	3500 MHz	25.3	67.5	24.7	66.2	-2.37%	-1.93%
2023-6-15	3700 MHz	24.4	67.3	24.7	68.3	1.23%	1.49%
2023-6-16	3900 MHz	24.1	69.6	24.9	71.1	3.32%	2.16%
2023-6-16	4100 MHz	23.6	68.3	23.2	67.5	-1.69%	-1.17%
2023-6-18	5250 MHz	22.3	78.1	22.1	77.3	-0.90%	-1.02%
2023-6-19	5600 MHz	23.7	83.2	23.2	81.4	-2.11%	-2.16%
2023-6-20	5750 MHz	22.8	80.4	23.1	81.6	1.32%	1.49%

9 Measurement Procedures

9.1 Tests to be performed

In order to determine the highest value of the peak spatial-average SAR of a handset, all device positions, configurations and operational modes shall be tested for each frequency band according to steps 1 to 3 below. A flowchart of the test process is shown in picture 9.1.

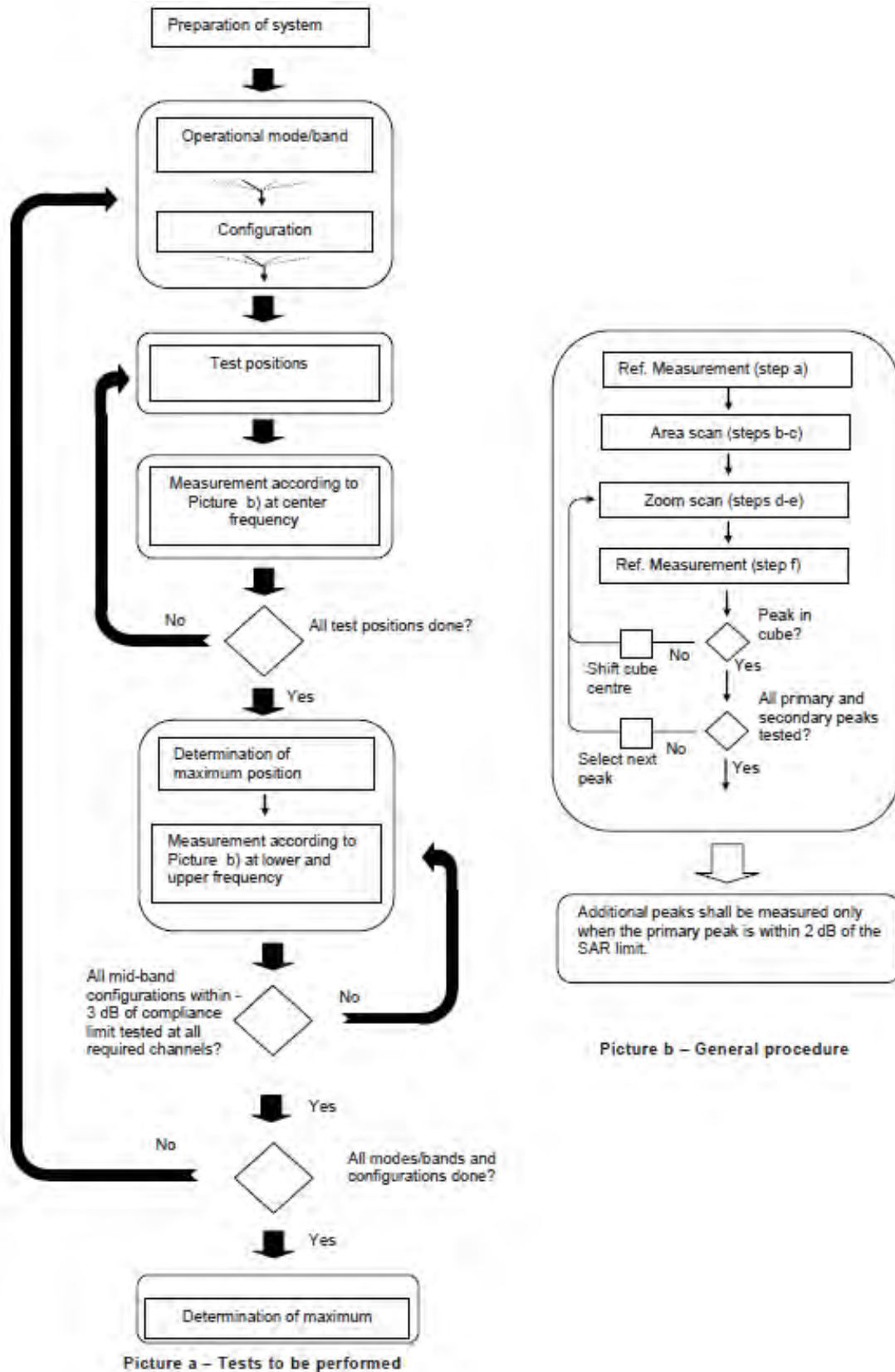
Step 1: The tests described in 9.2 shall be performed at the channel that is closest to the centre of the transmit frequency band (f_c) for:

- a) all device positions (cheek and tilt, for both left and right sides of the SAM phantom, as described in annex D),
- b) all configurations for each device position in a), e.g., antenna extended and retracted, and
- c) all operational modes, e.g., analogue and digital, for each device position in a) and configuration in b) in each frequency band.

If more than three frequencies need to be tested according to 11.1 (i.e., $N_c > 3$), then all frequencies, configurations and modes shall be tested for all of the above test conditions.

Step 2: For the condition providing highest peak spatial-average SAR determined in Step 1, perform all tests described in 9.2 at all other test frequencies, i.e., lowest and highest frequencies. In addition, for all other conditions (device position, configuration and operational mode) where the peak spatial-average SAR value determined in Step 1 is within 3 dB of the applicable SAR limit, it is recommended that all other test frequencies shall be tested as well.

Step 3: Examine all data to determine the highest value of the peak spatial-average SAR found in Steps 1 to 2.



Picture 9.1 Block diagram of the tests to be performed

9.2 General Measurement Procedure

The area and zoom scan resolutions specified in the table below must be applied to the SAR measurements and fully documented in SAR reports to qualify for TCB approval. Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1-g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std 1528-2003. The results should be documented as part of the system validation records and may be requested to support test results when all the measurement parameters in the following table are not satisfied.

		≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface		5 ± 1 mm	$\frac{1}{2} \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location		$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
Maximum area scan spatial resolution: Δx_{Area} , Δy_{Area}		≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
		When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be \leq the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: Δx_{Zoom} , Δy_{Zoom}		≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$	≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1 st two points closest to phantom surface	≤ 4 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$
Minimum zoom scan volume	x, y, z	≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details. * When zoom scan is required and the <i>reported</i> SAR from the area scan based 1-g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.			

9.3 WCDMA Measurement Procedures for SAR

The following procedures are applicable to WCDMA handsets operating under 3GPP Release99, Release 5 and Release 6. The default test configuration is to measure SAR with an established radio link between the DUT and a communication test set using a 12.2kbps RMC (reference measurement channel) configured in Test Loop Mode 1. SAR is selectively confirmed for other physical channel configurations (DPCCH & DPDCH_n), HSDPA and HSPA (HSUPA/HSDPA) modes according to output power, exposure conditions and device operating capabilities. Both uplink and downlink should be configured with the same RMC or AMR, when required. SAR for Release 5 HSDPA and Release 6 HSPA are measured using the applicable FRC (fixed reference channel) and E-DCH reference channel configurations. Maximum output power is verified according to applicable versions of 3GPP TS 34.121 and SAR must be measured according to these maximum output conditions. When Maximum Power Reduction (MPR) is not implemented according to Cubic Metric (CM) requirements for Release 6 HSPA, the following procedures do not apply.

For Release 5 HSDPA Data Devices:

Sub-test	β_c	β_d	β_d (SF)	β_c / β_d	β_{hs}	CM/dB
1	2/15	15/15	64	2/15	4/15	0.0
2	12/15	15/15	64	12/15	24/25	1.0
3	15/15	8/15	64	15/8	30/15	1.5
4	15/15	4/15	64	15/4	30/15	1.5

For Release 6 HSPA Data Devices

Sub-test	β_c	β_d	β_d (SF)	β_c / β_d	β_{hs}	β_{ec}	β_{ed}	β_{ed} (SF)	β_{ed} (codes)	CM (dB)	MPR (dB)	AG Index	E-TFCI
1	11/15	15/15	64	11/15	22/15	209/225	1039/225	4	1	1.5	1.5	20	75
2	6/15	15/15	64	6/15	12/15	12/15	12/15	4	1	1.5	1.5	12	67
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed1}:47/15$ $\beta_{ed2}:47/15$	4	2	1.5	1.5	15	92
4	2/15	15/15	64	2/15	4/15	4/15	56/75	4	1	1.5	1.5	17	71
5	15/15	15/15	64	15/15	24/15	30/15	134/15	4	1	1.5	1.5	21	81

Rel.8 DC-HSDPA (Cat 24)

SAR test exclusion for Rel.8 DC-HSDPA must satisfy the SAR test exclusion requirements of Rel.5 HSDPA. SAR test exclusion for DC-HSDPA devices is determined by power measurements according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to qualify for SAR test exclusion.

9.4 SAR Measurement for LTE

SAR tests for LTE are performed with a base station simulator, Rohde & Schwarz CMW500. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. All powers were measured with the CMW 500.

It is performed for conducted power and SAR based on the KDB941225 D05.

SAR is evaluated separately according to the following procedures for the different test positions in each exposure condition – head, body, body-worn accessories and other use conditions. The procedures in the following subsections are applied separately to test each LTE frequency band.

1) QPSK with 1 RB allocation

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.

2) QPSK with 50% RB allocation

The procedures required for 1 RB allocation in 1) are applied to measure the SAR for QPSK with 50% RB allocation.

3) QPSK with 100% RB allocation

For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation in 1) and 2) are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.

TDD test:

TDD testing is performed using guidance from FCC KDB 941225 D05 and the SAR test guidance provided in April 2013 TCB works hop notes. TDD is tested at the highest duty factor using UL-DL configuration 0 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211.

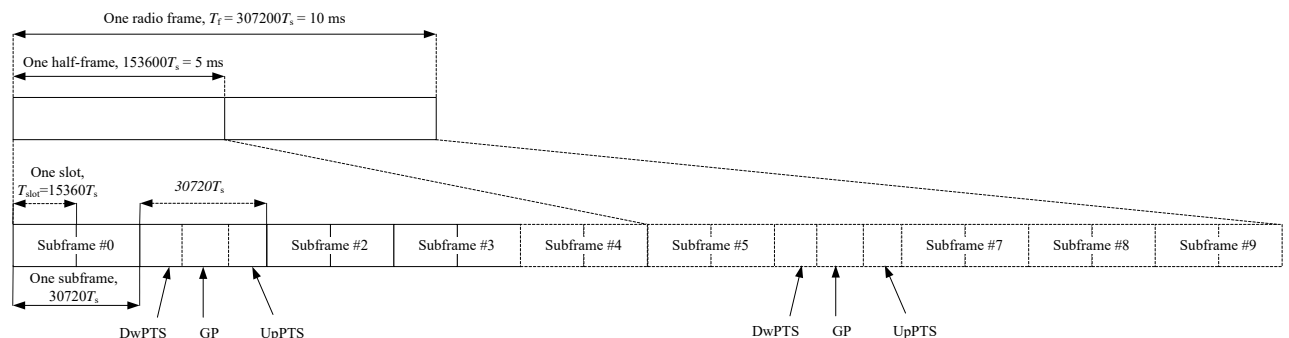


Figure 9.2: Frame structure type 2 (for 5 ms switch-point periodicity)

Table 9.1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$			$7680 \cdot T_s$		
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-		
9	$13168 \cdot T_s$			-		

Table 9.2: Uplink-downlink configurations

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U	U	D	S	U	U	D

Duty factor is calculated by:

$$\begin{aligned}
 \text{Duty factor} &= \text{uplink frame} \cdot 6 + \text{UpPTS} \cdot 2 / \text{one frame length} \\
 &= (30720 \cdot T_s \cdot 6 + 5120 \cdot T_s \cdot 2) / 307200 \cdot T_s \\
 &= 0.633
 \end{aligned}$$

9.5 Bluetooth & Wi-Fi Measurement Procedures for SAR

Normal network operating configurations are not suitable for measuring the SAR of 802.11 transmitters in general. Unpredictable fluctuations in network traffic and antenna diversity conditions can introduce undesirable variations in SAR results. The SAR for these devices should be measured using chipset based test mode software to ensure that the results are consistent and reliable.

Chipset based test mode software is hardware dependent and generally varies among manufacturers. The device operating parameters established in a test mode for SAR measurements must be identical to those programmed in production units, including output power levels, amplifier gain settings and other RF performance tuning parameters. The test frequencies should correspond to actual channel frequencies defined for domestic use. SAR for devices with switched diversity should be measured with only one antenna transmitting at a time during each SAR measurement, according to a fixed modulation and data rate. The same data pattern should be used for all measurements.

9.6 Power Drift

To control the output power stability during the SAR test, DASY5 system calculates the power drift by measuring the E-field at the same location at the beginning and at the end of the measurement for each test position. These drift values can be found in section 14 labeled as: (Power Drift [dB]). This ensures that the power drift during one measurement is within 5%.

10 Area Scan Based 1-g SAR

10.1 Requirement of KDB

According to the KDB447498 D01, when the implementation is based the specific polynomial fit algorithm as presented at the 29th Bioelectromagnetics Society meeting (2007) and the estimated 1-gSAR is ≤ 1.2 W/kg, a zoom scan measurement is not required provided it is also not needed for any other purpose; for example, if the peak SAR location required for simultaneous transmission SAR test exclusion can be determined accurately by the SAR system or manually to discriminate between distinctive peaks and scattered noisy SAR distributions from area scans.

There must not be any warning or alert messages due to various measurement concerns identified by the SAR system; for example, noise in measurements, peaks too close to scan boundary, peaks are too sharp, spatial resolution and uncertainty issues etc. The SAR system verification must also demonstrate that the area scan estimated 1-g SAR is within 3% of the zoom scan 1-g SAR (See Annex B). When all the SAR results for each exposure condition in a frequency band and wireless mode are based on estimated 1-g SAR, the 1-g SAR for the highest SAR configuration must be determined by a zoom scan.

10.2 Fast SAR Algorithms

The approach is based on the area scan measurement applying a frequency dependent attenuation parameter. This attenuation parameter was empirically determined by analyzing a large number of phones. The MOTOROLA FAST SAR was developed and validated by the MOTOROLA Research Group in Ft. Lauderdale.

In the initial study, an approximation algorithm based on Linear fit was developed. The accuracy of the algorithm has been demonstrated across a broad frequency range (136-2450 MHz) and for both 1- and 10-g averaged SAR using a sample of 264 SAR measurements from 55 wireless handsets. For the sample size studied, the root-mean-squared errors of the algorithm are 1.2% and 5.8% for 1- and 10-g averaged SAR, respectively. The paper describing the algorithm in detail is expected to be published in August 2004 within the Special Issue of Transactions on MTT.

In the second step, the same research group optimized the fitting algorithm to an Polynomial fit whereby the frequency validity was extended to cover the range 30-6000MHz. Details of this study can be found in the BEMS 2007 Proceedings.

Both algorithms are implemented in DASY software.

11 Conducted Output Power

Table 11.1: Summary of Receiver detection mechanism-Main antenna

Antenna	Sensor Off	Sensor On WWAN only	Sensor On WWAN +WIFI	Sensor On WWAN only (ENDC)	Sensor On WWAN +WIFI (ENDC)
Main Antenna	Power Level A1	Power Level B1	Power Level C1	Power Level D1	Power Level E1

Table 11.2: Summary of Receiver detection mechanism-WIFI antenna

	WIFI only		
Antenna	Sensor Off	Sensor On WIFI only	Sensor On WIFI+WWAN
WIFI Antenna	Power Level A1	Power Level B1	Power Level C1

Note: The distance between the EUT and the phantom bottom is 15mm/20mm by sensor. The detail of proximity sensor is presented in Annex I.

11.1 GSM Measurement result

Table 11.1-1: The conducted power measurement results–GSM850 Power Level A1

GSM 850 GPRS (GMSK)	Measured timeslot-averaged output power (dBm)			calculation	Source-based time-averaged output power (dBm)			
	251	190	128		251	190	128	
1 Txslot	32.17	32.17	32.13	33.50	-9.03	23.14	23.14	23.10
2 Txslots	31.52	31.57	31.53	32.50	-6.02	25.50	25.55	25.51
3 Txslots	29.89	29.95	29.94	31.00	-4.26	25.63	25.69	25.68
4 Txslots	28.82	28.89	28.85	30.00	-3.01	25.81	25.88	25.84
GSM 850 EGPRS (GMSK)	Measured timeslot-averaged output power (dBm)			calculation	Source-based time-averaged output power (dBm)			
	251	190	128		251	190	128	
1 Txslot	32.06	32.14	32.11	33.50	-9.03	23.03	23.11	23.08
2 Txslots	31.46	31.54	31.51	32.50	-6.02	25.44	25.52	25.49
3 Txslots	29.85	29.93	29.91	31.00	-4.26	25.59	25.67	25.65
4 Txslots	28.78	28.86	28.83	30.00	-3.01	25.77	25.85	25.82
GSM 850 EGPRS (8PSK)	Measured timeslot-averaged output power (dBm)			calculation	Source-based time-averaged output power (dBm)			
	251	190	128		251	190	128	
1 Txslot	26.39	26.50	26.55	28.00	-9.03	17.36	17.47	17.52
2 Txslots	25.50	25.59	25.66	27.00	-6.02	19.48	19.57	19.64
3Txslots	23.30	23.38	23.46	24.50	-4.26	19.04	19.12	19.20
4 Txslots	22.07	24.47	22.23	23.50	-3.01	19.06	21.46	19.22

NOTES:

1) Division Factors

To average the power, the division factor is as follows:

1TX-slot = 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2TX-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3TX-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4TX-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

According to the conducted power as above, the body measurements are performed with 4Txslots for GSM850.

Table 11.1-2: The conducted power measurement results–GSM850 Power Level B1

GSM 850 GPRS (GMSK)	Measured timeslot-averaged output power (dBm)			calculation	Source-based time-averaged output power (dBm)			
	251	190	128		251	190	128	
1 Txslot	25.87	26.13	25.85	26.50	-9.03	16.84	17.10	16.82
2 Txslots	24.98	24.90	24.75	25.50	-6.02	18.96	18.88	18.73
3 Txslots	23.51	23.42	23.38	24.00	-4.26	19.25	19.16	19.12
4 Txslots	22.38	22.30	22.25	23.00	-3.01	19.37	19.29	19.24
GSM 850 EGPRS (GMSK)	Measured timeslot-averaged output power (dBm)			calculation	Source-based time-averaged output power (dBm)			
	251	190	128		251	190	128	
1 Txslot	25.89	26.05	25.90	26.50	-9.03	16.86	17.02	16.87
2 Txslots	24.89	24.94	24.85	25.50	-6.02	18.87	18.92	18.83
3 Txslots	23.44	23.48	23.34	24.00	-4.26	19.18	19.22	19.08
4 Txslots	22.34	22.40	22.34	23.00	-3.01	19.33	19.39	19.33
GSM 850 EGPRS (8PSK)	Measured timeslot-averaged output power (dBm)			calculation	Source-based time-averaged output power (dBm)			
	251	190	128		251	190	128	
1 Txslot	24.98	24.97	25.02	26.00	-9.03	15.95	15.94	15.99
2 Txslots	23.96	24.02	24.09	25.00	-6.02	17.94	18.00	18.07
3Txslots	22.33	22.59	22.57	23.50	-4.26	18.07	18.33	18.31
4 Txslots	20.97	20.97	21.13	22.50	-3.01	17.96	17.96	18.12

NOTES:

1) Division Factors

To average the power, the division factor is as follows:

1TX-slot = 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2TX-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3TX-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4TX-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

According to the conducted power as above, the body measurements are performed with 4Txslots for GSM850.

Table 11.1-3: The conducted power measurement results–GSM850 Power Level C1

GSM 850 GPRS (GMSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	251	190	128			251	190	128
1 Txslot	23.82	24.04	23.93	24.50	-9.03	14.79	15.01	14.90
2 Txslots	22.64	22.96	22.75	23.50	-6.02	16.62	16.94	16.73
3 Txslots	21.43	21.49	21.41	22.00	-4.26	17.17	17.23	17.15
4 Txslots	20.35	20.48	20.33	21.00	-3.01	17.34	17.47	17.32
GSM 850 EGPRS (GMSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	251	190	128			251	190	128
1 Txslot	23.86	23.95	23.92	24.50	-9.03	14.83	14.92	14.89
2 Txslots	22.74	22.87	22.76	23.50	-6.02	16.72	16.85	16.74
3 Txslots	21.34	21.39	21.35	22.00	-4.26	17.08	17.13	17.09
4 Txslots	20.35	20.43	20.25	21.00	-3.01	17.34	17.42	17.24
GSM 850 EGPRS (8PSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	251	190	128			251	190	128
1 Txslot	23.14	23.12	23.22	24.00	-9.03	14.11	14.09	14.19
2 Txslots	22.08	22.40	22.24	23.00	-6.02	16.06	16.38	16.22
3Txslots	20.53	20.63	20.55	21.50	-4.26	16.27	16.37	16.29
4 Txslots	20.13	20.14	20.19	21.00	-3.01	17.12	17.13	17.18

NOTES:

1) Division Factors

To average the power, the division factor is as follows:

1TX-slot = 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2TX-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3TX-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4TX-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

According to the conducted power as above, the body measurements are performed with 4Txslots for GSM850.

Table 11.1-4: The conducted power measurement results-GSM1900 Power Level A1

PCS1900 GPRS (GMSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	810	661	512			810	661	512
1 Txslot	29.89	29.98	29.97	31.00	-9.03	20.86	20.95	20.94
2 Txslots	29.08	29.15	29.14	30.00	-6.02	23.06	23.13	23.12
3 Txslots	27.15	27.18	27.20	28.50	-4.26	22.89	22.92	22.94
4 Txslots	26.12	26.18	26.15	27.50	-3.01	23.11	23.17	23.14
PCS1900 EGPRS (GMSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	810	661	512			810	661	512
1 Txslot	29.87	29.96	29.95	31.00	-9.03	20.84	20.93	20.92
2 Txslots	29.05	29.13	29.12	30.00	-6.02	23.03	23.11	23.10
3 Txslots	27.13	27.16	27.19	28.50	-4.26	22.87	22.90	22.93
4 Txslots	26.10	26.15	26.16	27.50	-3.01	23.09	23.14	23.15
PCS1900 EGPRS (8PSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	810	661	512			810	661	512
1 Txslot	25.88	25.91	26.01	27.50	-9.03	16.85	16.88	16.98
2 Txslots	24.88	24.90	26.19	26.50	-6.02	18.86	18.88	20.17
3Txslots	22.84	23.12	22.87	24.50	-4.26	18.58	18.86	18.61
4 Txslots	21.58	21.93	21.62	23.00	-3.01	18.57	18.92	18.61

NOTES:

1) Division Factors

To average the power, the division factor is as follows:

1TX-slot = 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2TX-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3TX-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4TX-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

According to the conducted power as above, the body measurements are performed with 4Txslots for GSM1900.

Table 11.1-5: The conducted power measurement results-GSM1900 Power Level B1

PCS1900 GPRS (GMSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	810	661	512			810	661	512
1 Txslot	19.43	19.51	19.49	21.00	-9.03	10.40	10.48	10.46
2 Txslots	18.51	18.55	18.57	20.00	-6.02	12.49	12.53	12.55
3 Txslots	16.94	16.97	17.01	18.50	-4.26	12.68	12.71	12.75
4 Txslots	16.34	16.30	16.08	17.00	-3.01	13.33	13.29	13.07
PCS1900 EGPRS (GMSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	810	661	512			810	661	512
1 Txslot	19.47	19.49	19.51	21.00	-9.03	10.44	10.46	10.48
2 Txslots	18.52	18.56	18.55	20.00	-6.02	12.50	12.54	12.53
3 Txslots	17.04	17.05	17.05	18.50	-4.26	12.78	12.79	12.79
4 Txslots	16.25	16.40	16.07	17.00	-3.01	13.24	13.39	13.06
PCS1900 EGPRS (8PSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	810	661	512			810	661	512
1 Txslot	19.16	19.19	19.11	20.50	-9.03	10.13	10.16	10.08
2 Txslots	18.06	18.11	18.06	19.50	-6.02	12.04	12.09	12.04
3Txslots	16.65	16.37	16.33	18.00	-4.26	12.39	12.11	12.07
4 Txslots	15.22	15.67	15.44	16.50	-3.01	12.21	12.66	12.43

NOTES:

1) Division Factors

To average the power, the division factor is as follows:

1TX-slot = 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2TX-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3TX-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4TX-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

According to the conducted power as above, the body measurements are performed with 4Txslots for GSM1900.

Table 11.1-6: The conducted power measurement results-GSM1900 Power Level C1

PCS1900 GPRS (GMSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	810	661	512			810	661	512
1 Txslot	17.17	17.50	17.12	19.00	-9.03	8.14	8.47	8.09
2 Txslots	16.58	16.83	16.59	18.00	-6.02	10.56	10.81	10.57
3 Txslots	15.14	15.15	15.04	16.50	-4.26	10.88	10.89	10.78
4 Txslots	14.13	14.10	14.01	15.00	-3.01	11.12	11.09	11.00
PCS1900 EGPRS (GMSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	810	661	512			810	661	512
1 Txslot	17.25	17.48	17.18	19.00	-9.03	8.22	8.45	8.15
2 Txslots	16.57	16.77	16.65	18.00	-6.02	10.55	10.75	10.63
3 Txslots	15.21	15.23	15.10	16.50	-4.26	10.95	10.97	10.84
4 Txslots	14.11	14.07	14.05	15.00	-3.01	11.10	11.06	11.04
PCS1900 EGPRS (8PSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	810	661	512			810	661	512
1 Txslot	17.11	17.14	17.10	18.00	-9.03	8.08	8.11	8.07
2 Txslots	15.94	16.02	15.99	17.00	-6.02	9.92	10.00	9.97
3Txslots	14.38	14.42	14.37	15.50	-4.26	10.12	10.16	10.11
4 Txslots	13.26	14.35	14.38	15.00	-3.01	10.25	11.34	11.37

NOTES:

1) Division Factors

To average the power, the division factor is as follows:

1TX-slot = 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2TX-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3TX-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4TX-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

According to the conducted power as above, the body measurements are performed with 4Txslots for GSM1900.

11.2 WCDMA Measurement result

Table 11.2-1: The conducted Power for WCDMA – Power Level A1

WCDMA850	FDDV result (dBm)			Tune up
	4233/4458	4183/4408	4132/4357	
	(846.6MHz)	(836.6MHz)	(826.4MHz)	
	23.59	23.69	23.68	24.5
HSUPA	20.37	20.41	20.38	21.5
	19.82	19.86	19.82	21.5
	19.92	19.93	19.92	21.5
	19.38	19.43	19.38	21
	20.85	20.88	20.87	22
HSPA+	21.46	21.49	21.44	22.5
DC-HSDPA	22.42	22.45	22.40	23.5
	21.86	21.90	21.86	23.5
	21.45	21.48	21.46	23
	21.39	21.42	21.38	23

WCDMA1700	FDDIV result (dBm)			Tune up
	1513/1738	1412/1637	1312/1537	
	(1752.6MHz)	(1732.4MHz)	(1712.4MHz)	
	24.04	24.06	24.10	25
HSUPA	19.85	19.90	19.88	21.5
	19.85	19.90	19.88	21.5
	19.97	19.99	19.98	21.5
	19.46	19.51	19.46	21
	20.82	20.86	20.85	22.5
HSPA+	21.61	21.62	21.58	22.5
DC-HSDPA	22.01	22.02	22.01	23.5
	21.97	22.00	21.98	23.5
	21.51	21.54	21.51	23
	21.46	21.51	21.49	23

WCDMA1700	FDDII result (dBm)			Tune up
	9538/9938	9400/9800	9262/9662	
	(1907.6MHz)	(1880MHz)	(1852.4MHz)	
	24.27	24.24	24.31	25
HSUPA	20.38	20.32	20.39	21.5
	20.26	20.28	20.26	21.5
	20.19	20.23	20.19	21.5
	19.73	19.78	19.73	21
	21.19	21.20	21.19	22
HSPA+	21.94	21.95	21.92	22.5
DC-HSDPA	22.34	22.35	22.33	23.5
	22.31	22.32	22.29	23.5
	21.87	21.91	21.90	23
	21.81	21.84	21.80	23

Table 11.2-2: The conducted Power for WCDMA - Power Level B1

WCDMA850	FDDV result (dBm)			Tune up
	4233/4458	4183/4408	4132/4357	
	(846.6MHz)	(836.6MHz)	(826.4MHz)	
	16.72	16.79	16.75	18.50
HSUPA	13.54	13.56	13.58	14.50
	13.63	13.67	13.67	14.50
	13.69	13.69	13.71	14.50
	13.12	13.20	13.33	14.50
	13.21	13.21	13.30	14.50
HSPA+	15.24	15.25	15.32	17.00
DC-HSDPA	15.64	15.68	15.73	16.50
	15.94	15.98	16.08	16.50
	15.15	15.21	15.34	16.50
	15.08	15.15	15.26	16.50

WCDMA1700	FDDIV result (dBm)			Tune up
	1513/1738	1412/1637	1312/1537	
	(1752.6MHz)	(1732.4MHz)	(1712.4MHz)	
	13.62	13.65	13.64	14.50
HSUPA	10.86	10.87	10.91	12.00
	10.35	10.36	10.39	12.00
	10.37	10.38	10.42	12.00
	10.02	10.06	10.07	12.00
	10.06	10.06	10.11	12.00
HSPA+	11.91	11.94	11.95	12.50
DC-HSDPA	12.34	12.37	12.38	13.00
	12.32	12.36	12.41	13.00
	11.89	11.91	11.93	13.00
	11.87	11.89	11.92	13.00

WCDMA1700	FDDII result (dBm)			Tune up
	9538/9938	9400/9800	9262/9662	
	(1907.6MHz)	(1880MHz)	(1852.4MHz)	
	14.08	14.16	14.15	15.00
HSUPA	11.48	11.51	11.64	12.50
	10.98	11.01	11.03	12.50
	10.94	11.02	11.03	12.50
	10.53	10.55	10.61	12.50
	10.54	10.55	10.51	12.50
HSPA+	12.49	12.51	12.53	13.00
DC-HSDPA	12.88	12.97	12.99	13.50
	12.93	12.96	12.97	13.50
	12.51	12.55	12.58	13.50
	12.52	12.54	12.53	13.50

Table 11.2-3: The conducted Power for WCDMA - Power Level C1

WCDMA850	FDDV result (dBm)			Tune up
	4233/4458	4183/4408	4132/4357	
	(846.6MHz)	(836.6MHz)	(826.4MHz)	
	15.40	15.47	15.46	16.50
HSUPA	12.26	12.37	12.43	13.50
	11.95	12.02	12.04	13.50
	12.44	12.55	12.58	13.50
	11.99	12.07	12.16	13.50
	11.92	11.95	12.01	13.50
HSPA+	13.93	13.96	14.03	15.00
DC-HSDPA	14.64	14.77	14.82	15.50
	13.9	13.97	14.05	15.50
	13.51	13.53	13.68	15.50
	13.54	13.55	13.51	15.50

WCDMA1700	FDDIV result (dBm)			Tune up
	1513/1738	1412/1637	1312/1537	
	(1752.6MHz)	(1732.4MHz)	(1712.4MHz)	
	12.43	12.43	12.54	13.5
HSUPA	9.53	9.60	9.78	11
	9.01	9.07	9.09	11
	9.05	9.09	9.21	11
	8.61	8.62	8.75	11
	8.41	8.44	8.53	11
HSPA+	10.62	10.66	10.74	11.5
DC-HSDPA	11.04	11.09	11.11	11.5
	10.27	10.31	10.48	11.5
	9.69	9.84	9.95	11.5
	9.52	9.79	9.91	11.5

WCDMA1700	FDDII result (dBm)			Tune up
	9538/9938	9400/9800	9262/9662	
	(1907.6MHz)	(1880MHz)	(1852.4MHz)	
	12.94	13.06	12.98	14
HSUPA	10.08	10.15	10.26	10.5
	9.62	9.66	9.68	10.5
	9.58	9.67	9.72	10.5
	9.04	9.18	9.28	10.5
	8.94	9.06	9.12	10.5
HSPA+	11.15	11.24	11.26	12
DC-HSDPA	11.53	11.66	11.58	12
	10.82	10.88	10.92	12
	10.25	10.40	10.68	12
	10.28	10.37	10.44	12

11.3 LTE Measurement result

Table 11.3-1: Maximum Power Reduction (MPR) for LTE

Modulation	Channel bandwidth / Transmission bandwidth configuration [RB]						MPR (dB)
	1.4	3	5	10	15	20	
	MHz	MHz	MHz	MHz	MHz	MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	2
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	2
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	3

Table 11.3-2: The tune up for LTE

Band	Sensor Off	Sensor On WWAN only	Sensor On WWAN +WIFI	Sensor On WWAN only (ENDC)	Sensor On WWAN +WIFI (ENDC)
	Power Level A1	Power Level B1	Power Level C1	Power Level D1	Power Level E1
LTE B2-ANT1	25	16	13.5	12	12
LTE B7	24	14.5	12.5	12.5	10.5
LTE B12	25	18.5	18.5	/	/
LTE B13	25	20.5	18.5	/	/
LTE B25	25	15.5	14	/	/
LTE B26	25	18.5	17	/	/
LTE B41 PC3	24.5	12.5	10	/	/
LTE B41 PC2	27.5	16	13	/	/
LTE B66-ANT1	25.5	16	14	12	12
LTE B71	25.5	21	19	/	/
LTE B2-ANT3	25	/	/	13	11
LTE B66-ANT3	25.5	/	/	12.5	11.5

LTE B2-ANT1 (Power Level A1)

LTE B2-ANT1						
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	
1.4MHz	1RB-High (5)	1909.3 (19193)	24.18	23.23	22.24	
		1880 (18900)	24.18	23.35	22.26	
		1850.7 (18607)	24.18	23.34	22.22	
	1RB-Middle (3)	1909.3 (19193)	24.15	23.32	22.26	
		1880 (18900)	24.20	23.40	22.24	
		1850.7 (18607)	24.17	23.35	22.23	
	1RB-Low (0)	1909.3 (19193)	24.12	23.38	22.23	
		1880 (18900)	24.20	23.38	22.25	
		1850.7 (18607)	24.19	23.41	22.29	
	3RB-High (3)	1909.3 (19193)	24.15	23.10	22.19	
		1880 (18900)	24.14	23.16	22.15	
		1850.7 (18607)	24.22	23.17	22.27	
	3RB-Middle (1)	1909.3 (19193)	24.16	23.18	22.24	
		1880 (18900)	24.16	23.20	22.23	
		1850.7 (18607)	24.19	23.24	22.23	
	3RB-Low (0)	1909.3 (19193)	24.21	23.16	22.22	
		1880 (18900)	24.19	23.12	22.15	
		1850.7 (18607)	24.19	23.16	22.23	
	6RB (0)	1909.3 (19193)	23.16	22.23	21.00	
		1880 (18900)	23.19	22.20	21.02	
		1850.7 (18607)	23.22	22.19	21.11	
	3MHz	1RB-High (14)	1908.5 (19185)	24.14	23.26	22.18
			1880 (18900)	24.17	23.31	22.29
			1851.5 (18615)	24.20	23.32	22.31
		1RB-Middle (7)	1908.5 (19185)	24.19	23.32	22.28
			1880 (18900)	24.18	23.34	22.31
			1851.5 (18615)	24.23	23.35	22.38
1RB-Low (0)		1908.5 (19185)	24.15	23.35	22.25	
		1880 (18900)	24.22	23.40	22.27	
		1851.5 (18615)	24.18	23.39	22.30	
8RB-High (7)		1908.5 (19185)	23.12	22.15	21.10	
		1880 (18900)	23.12	22.14	21.07	
		1851.5 (18615)	23.15	22.19	21.17	
8RB-Middle (4)		1908.5 (19185)	23.18	22.19	21.09	
		1880 (18900)	23.16	22.18	21.09	
		1851.5 (18615)	23.14	22.20	21.16	
8RB-Low (0)		1908.5 (19185)	23.15	22.21	21.16	
		1880 (18900)	23.14	22.19	21.16	

		1851.5 (18615)	23.18	22.21	21.16	
	15RB (0)	1908.5 (19185)	23.11	22.19	21.12	
		1880 (18900)	23.12	22.14	21.10	
		1851.5 (18615)	23.15	22.17	21.12	
5MHz	1RB-High (24)	1907.5 (19175)	24.20	23.45	22.24	
		1880 (18900)	24.22	23.42	22.29	
		1852.5 (18625)	24.23	23.41	22.28	
	1RB-Middle (12)	1907.5 (19175)	24.19	23.34	22.22	
		1880 (18900)	24.31	23.35	22.33	
		1852.5 (18625)	24.30	23.48	22.39	
	1RB-Low (0)	1907.5 (19175)	24.21	23.34	22.26	
		1880 (18900)	24.26	23.41	22.32	
		1852.5 (18625)	24.24	23.45	22.31	
	12RB-High (13)	1907.5 (19175)	23.10	22.06	21.09	
		1880 (18900)	23.17	22.09	21.08	
		1852.5 (18625)	23.24	22.20	21.11	
	12RB-Middle (6)	1907.5 (19175)	23.18	22.16	21.13	
		1880 (18900)	23.19	22.13	21.15	
		1852.5 (18625)	23.18	22.16	21.16	
	12RB-Low (0)	1907.5 (19175)	23.21	22.18	21.20	
		1880 (18900)	23.27	22.16	21.24	
		1852.5 (18625)	23.22	22.16	21.11	
	25RB (0)	1907.5 (19175)	23.16	22.18	21.14	
		1880 (18900)	23.24	22.24	21.15	
		1852.5 (18625)	23.17	22.21	21.14	
	10MHz	1RB-High (49)	1905 (19150)	24.22	23.35	22.29
			1880 (18900)	24.22	23.36	22.27
			1855 (18650)	24.28	23.37	22.30
1RB-Middle (24)		1905 (19150)	24.26	23.37	22.21	
		1880 (18900)	24.32	23.43	22.37	
		1855 (18650)	24.28	23.36	22.36	
1RB-Low (0)		1905 (19150)	24.23	23.31	22.28	
		1880 (18900)	24.25	23.38	22.29	
		1855 (18650)	24.30	23.48	22.33	
25RB-High (25)		1905 (19150)	23.19	22.14	21.08	
		1880 (18900)	23.20	22.20	21.16	
		1855 (18650)	23.24	22.24	21.18	
25RB-Middle (12)		1905 (19150)	23.26	22.22	21.16	
		1880 (18900)	23.20	22.19	21.14	
		1855 (18650)	23.21	22.17	21.17	
25RB-Low (0)		1905 (19150)	23.25	22.22	21.14	
		1880 (18900)	23.24	22.18	21.19	

		1855 (18650)	23.18	22.19	21.15	
	50RB (0)	1905 (19150)	23.19	22.14	21.08	
		1880 (18900)	23.16	22.15	21.16	
		1855 (18650)	23.27	22.22	21.15	
		1902.5 (19125)	24.24	23.42	22.23	
15MHz	1RB-High (74)	1880 (18900)	24.18	23.42	22.20	
		1857.5 (18675)	24.22	23.40	22.29	
		1902.5 (19125)	24.29	23.40	22.32	
	1RB-Middle (37)	1880 (18900)	24.32	23.42	22.28	
		1857.5 (18675)	24.32	23.50	22.30	
		1902.5 (19125)	24.21	23.30	22.29	
	1RB-Low (0)	1880 (18900)	24.20	23.35	22.26	
		1857.5 (18675)	24.25	23.42	22.33	
		1902.5 (19125)	23.23	22.21	21.24	
	36RB-High (38)	1880 (18900)	23.18	22.14	21.20	
		1857.5 (18675)	23.17	22.20	21.12	
		1902.5 (19125)	23.20	22.16	21.16	
	36RB-Middle (19)	1880 (18900)	23.21	22.19	21.20	
		1857.5 (18675)	23.27	22.17	21.20	
		1902.5 (19125)	23.17	22.24	21.11	
	36RB-Low (0)	1880 (18900)	23.19	22.24	21.23	
		1857.5 (18675)	23.26	22.17	21.20	
		1902.5 (19125)	23.17	22.21	21.07	
	75RB (0)	1880 (18900)	23.29	22.24	21.12	
		1857.5 (18675)	23.24	22.19	21.18	
		1900 (19100)	24.14	23.30	22.12	
	20MHz	1RB-High (99)	1880 (18900)	24.10	23.24	22.20
			1860 (18700)	24.17	23.33	22.30
			1900 (19100)	24.21	23.35	22.34
1RB-Middle (50)		1880 (18900)	24.23	23.45	22.34	
		1860 (18700)	24.25	23.36	22.25	
		1900 (19100)	24.10	23.24	22.22	
1RB-Low (0)		1880 (18900)	24.20	23.39	22.31	
		1860 (18700)	24.20	23.27	22.20	
		1900 (19100)	23.20	22.15	21.09	
50RB-High (50)		1880 (18900)	23.19	22.10	21.08	
		1860 (18700)	23.24	22.20	21.12	
		1900 (19100)	23.19	22.16	21.12	
50RB-Middle (25)		1880 (18900)	23.18	22.21	21.11	
		1860 (18700)	23.25	22.20	21.17	
		1900 (19100)	23.22	22.18	21.12	
50RB-Low (0)		1880 (18900)	23.18	22.23	21.13	

		1860 (18700)	23.17	22.20	21.13
	100RB (0)	1900 (19100)	23.22	22.18	21.15
		1880 (18900)	23.23	22.19	21.10
		1860 (18700)	23.24	22.20	21.10

LTE B2-ANT1 (Power Level B1)

LTE B2-ANT1						
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	
1.4MHz	1RB-High (5)	1909.3 (19193)	14.88	14.00	12.90	
		1880 (18900)	14.81	14.17	12.99	
		1850.7 (18607)	14.83	13.98	12.78	
	1RB-Middle (3)	1909.3 (19193)	15.06	14.08	13.03	
		1880 (18900)	14.98	14.31	13.06	
		1850.7 (18607)	15.06	14.28	12.94	
	1RB-Low (0)	1909.3 (19193)	14.87	14.02	13.04	
		1880 (18900)	14.33	14.01	13.15	
		1850.7 (18607)	14.79	14.00	12.86	
	3RB-High (3)	1909.3 (19193)	14.85	14.05	12.91	
		1880 (18900)	14.88	14.23	13.10	
		1850.7 (18607)	14.88	13.92	12.85	
	3RB-Middle (1)	1909.3 (19193)	14.95	14.20	12.91	
		1880 (18900)	14.99	14.38	13.02	
		1850.7 (18607)	15.05	14.24	13.18	
	3RB-Low (0)	1909.3 (19193)	14.82	14.23	13.10	
		1880 (18900)	14.27	14.00	13.13	
		1850.7 (18607)	14.85	14.21	12.87	
	6RB (0)	1909.3 (19193)	13.75	12.82	11.86	
		1880 (18900)	13.90	12.99	11.84	
		1850.7 (18607)	13.89	12.86	11.81	
	3MHz	1RB-High (14)	1908.5 (19185)	14.80	14.06	12.87
			1880 (18900)	14.78	14.15	12.94
			1851.5 (18615)	14.80	14.01	13.00
1RB-Middle (7)		1908.5 (19185)	14.95	14.19	13.07	
		1880 (18900)	14.91	14.17	13.16	
		1851.5 (18615)	14.89	14.32	12.95	
1RB-Low (0)		1908.5 (19185)	14.63	14.10	12.89	
		1880 (18900)	14.45	13.96	13.01	
		1851.5 (18615)	14.63	14.01	13.08	
8RB-High (7)		1908.5 (19185)	14.04	12.79	11.78	
		1880 (18900)	13.79	12.97	11.89	
		1851.5 (18615)	14.09	13.04	11.79	

	8RB-Middle (4)	1908.5 (19185)	13.75	12.99	11.90	
		1880 (18900)	13.88	12.79	11.93	
		1851.5 (18615)	13.90	12.90	11.83	
	8RB-Low (0)	1908.5 (19185)	13.93	13.03	11.96	
		1880 (18900)	13.84	12.98	11.79	
		1851.5 (18615)	13.97	12.94	11.73	
	15RB (0)	1908.5 (19185)	13.91	12.88	11.93	
		1880 (18900)	13.89	12.83	11.93	
		1851.5 (18615)	13.83	12.78	11.99	
5MHz	1RB-High (24)	1907.5 (19175)	14.73	14.10	13.01	
		1880 (18900)	14.71	14.13	13.05	
		1852.5 (18625)	14.83	14.00	12.80	
	1RB-Middle (12)	1907.5 (19175)	14.82	14.18	13.11	
		1880 (18900)	15.04	14.32	13.13	
		1852.5 (18625)	14.99	14.29	13.05	
	1RB-Low (0)	1907.5 (19175)	14.73	14.04	12.88	
		1880 (18900)	14.28	13.94	13.09	
		1852.5 (18625)	14.74	14.03	13.06	
	12RB-High (13)	1907.5 (19175)	13.92	13.02	11.98	
		1880 (18900)	13.84	13.00	11.97	
		1852.5 (18625)	14.06	12.93	11.94	
	12RB-Middle (6)	1907.5 (19175)	13.89	12.92	11.93	
		1880 (18900)	14.03	12.96	12.00	
		1852.5 (18625)	13.98	13.08	11.88	
	12RB-Low (0)	1907.5 (19175)	13.80	12.85	11.79	
		1880 (18900)	13.98	12.90	11.75	
		1852.5 (18625)	13.89	12.93	11.82	
	25RB (0)	1907.5 (19175)	13.84	12.94	11.89	
		1880 (18900)	14.07	12.87	11.80	
		1852.5 (18625)	13.87	12.80	11.88	
	10MHz	1RB-High (49)	1905 (19150)	14.82	14.02	13.00
			1880 (18900)	14.85	14.12	12.99
			1855 (18650)	14.89	14.04	12.79
1RB-Middle (24)		1905 (19150)	14.96	14.13	13.00	
		1880 (18900)	15.02	14.37	13.04	
		1855 (18650)	15.09	14.29	13.11	
1RB-Low (0)		1905 (19150)	14.63	14.02	12.98	
		1880 (18900)	14.26	14.13	13.15	
		1855 (18650)	14.63	14.01	12.87	
25RB-High (25)		1905 (19150)	13.94	12.78	11.79	
		1880 (18900)	13.87	12.86	11.86	
		1855 (18650)	14.11	13.03	11.96	

	25RB-Middle (12)	1905 (19150)	13.76	12.81	11.80
		1880 (18900)	14.06	12.89	12.04
		1855 (18650)	13.91	12.88	11.86
	25RB-Low (0)	1905 (19150)	13.80	12.79	11.84
		1880 (18900)	13.89	13.05	11.91
		1855 (18650)	13.89	12.70	11.96
	50RB (0)	1905 (19150)	13.86	12.93	11.86
		1880 (18900)	13.95	12.88	11.95
		1855 (18650)	13.84	12.94	11.94
15MHz	1RB-High (74)	1902.5 (19125)	14.68	14.09	12.88
		1880 (18900)	14.68	14.26	13.00
		1857.5 (18675)	14.78	14.08	12.94
	1RB-Middle (37)	1902.5 (19125)	14.88	14.23	12.98
		1880 (18900)	14.99	14.33	13.26
		1857.5 (18675)	15.06	14.16	13.16
	1RB-Low (0)	1902.5 (19125)	14.75	14.16	12.92
		1880 (18900)	14.45	14.10	12.93
		1857.5 (18675)	14.73	14.20	12.87
	36RB-High (38)	1902.5 (19125)	14.06	12.89	11.96
		1880 (18900)	13.83	12.98	11.74
		1857.5 (18675)	13.91	12.86	11.97
	36RB-Middle (19)	1902.5 (19125)	13.76	12.85	11.78
		1880 (18900)	13.97	12.94	12.03
		1857.5 (18675)	13.98	12.98	12.05
	36RB-Low (0)	1902.5 (19125)	13.77	12.83	11.96
		1880 (18900)	13.91	12.85	11.97
		1857.5 (18675)	13.89	12.73	11.93
	75RB (0)	1902.5 (19125)	13.90	12.98	11.87
		1880 (18900)	14.00	12.80	11.76
		1857.5 (18675)	14.05	12.94	11.91
20MHz	1RB-High (99)	1900 (19100)	14.80	14.06	13.02
		1880 (18900)	14.82	14.19	13.01
		1860 (18700)	14.82	14.02	12.91
	1RB-Middle (50)	1900 (19100)	14.97	14.14	13.03
		1880 (18900)	14.98	14.31	13.16
		1860 (18700)	14.99	14.22	13.08
	1RB-Low (0)	1900 (19100)	14.78	14.17	13.00
		1880 (18900)	14.41	14.09	13.05
		1860 (18700)	14.76	14.12	13.00
	50RB-High (50)	1900 (19100)	13.96	12.93	11.93
		1880 (18900)	13.88	12.93	11.87
		1860 (18700)	14.01	12.96	11.94

	50RB-Middle (25)	1900 (19100)	13.89	12.92	11.88
		1880 (18900)	13.99	12.94	11.94
		1860 (18700)	13.93	13.00	11.96
	50RB-Low (0)	1900 (19100)	13.92	12.93	11.91
		1880 (18900)	13.93	12.97	11.89
		1860 (18700)	13.89	12.85	11.86
	100RB (0)	1900 (19100)	13.85	12.92	11.93
		1880 (18900)	14.01	12.94	11.90
		1860 (18700)	13.98	12.92	11.92

LTE B2-ANT1 (Power Level C1)

LTE B2-ANT1						
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	
1.4MHz	1RB-High (5)	1909.3 (19193)	12.69	11.91	10.85	
		1880 (18900)	12.80	11.87	11.00	
		1850.7 (18607)	12.61	12.14	10.72	
	1RB-Middle (3)	1909.3 (19193)	12.85	12.07	10.86	
		1880 (18900)	12.93	12.10	10.98	
		1850.7 (18607)	12.71	12.18	10.92	
	1RB-Low (0)	1909.3 (19193)	12.68	12.01	10.79	
		1880 (18900)	12.70	12.20	10.84	
		1850.7 (18607)	12.70	12.02	10.95	
	3RB-High (3)	1909.3 (19193)	12.85	12.05	11.00	
		1880 (18900)	12.87	11.78	10.88	
		1850.7 (18607)	12.61	12.10	10.81	
	3RB-Middle (1)	1909.3 (19193)	12.70	11.99	11.08	
		1880 (18900)	12.87	12.04	10.94	
		1850.7 (18607)	12.84	12.18	10.94	
	3RB-Low (0)	1909.3 (19193)	12.86	11.92	10.81	
		1880 (18900)	12.75	12.13	10.84	
		1850.7 (18607)	12.81	12.12	10.94	
	6RB (0)	1909.3 (19193)	11.87	10.78	9.84	
		1880 (18900)	11.80	10.79	9.82	
		1850.7 (18607)	11.95	10.73	9.78	
	3MHz	1RB-High (14)	1908.5 (19185)	12.73	11.87	10.76
			1880 (18900)	12.81	11.80	10.81
			1851.5 (18615)	12.77	12.00	10.74
1RB-Middle (7)		1908.5 (19185)	12.75	12.14	10.92	
		1880 (18900)	12.79	12.27	10.94	
		1851.5 (18615)	12.71	12.21	10.95	
1RB-Low (0)	1908.5 (19185)	12.66	11.82	10.93		

		1880 (18900)	12.71	12.19	10.95	
		1851.5 (18615)	12.93	12.14	10.93	
		1908.5 (19185)	11.71	10.87	9.65	
	8RB-High (7)	1880 (18900)	11.74	10.85	9.77	
		1851.5 (18615)	11.88	10.77	9.86	
		1908.5 (19185)	12.02	10.93	9.70	
	8RB-Middle (4)	1880 (18900)	11.96	10.89	9.81	
		1851.5 (18615)	11.82	10.74	9.82	
		1908.5 (19185)	11.89	10.73	9.87	
	8RB-Low (0)	1880 (18900)	11.81	10.82	9.81	
		1851.5 (18615)	11.87	10.85	9.64	
		1908.5 (19185)	11.94	10.79	9.70	
	15RB (0)	1880 (18900)	11.82	10.77	9.84	
		1851.5 (18615)	11.99	10.91	9.68	
		1907.5 (19175)	12.71	12.01	10.85	
5MHz	1RB-High (24)	1880 (18900)	12.88	11.89	10.95	
		1852.5 (18625)	12.80	11.96	10.71	
		1907.5 (19175)	12.65	12.00	10.93	
	1RB-Middle (12)	1880 (18900)	12.90	12.19	10.95	
		1852.5 (18625)	12.77	12.12	11.02	
		1907.5 (19175)	12.71	11.90	10.71	
	1RB-Low (0)	1880 (18900)	12.71	11.98	10.79	
		1852.5 (18625)	12.92	12.13	11.02	
		1907.5 (19175)	11.78	10.67	9.62	
	12RB-High (13)	1880 (18900)	11.92	10.88	9.81	
		1852.5 (18625)	11.93	10.97	9.89	
		1907.5 (19175)	11.78	10.71	9.93	
	12RB-Middle (6)	1880 (18900)	11.80	10.79	9.94	
		1852.5 (18625)	11.95	10.80	9.93	
		1907.5 (19175)	11.75	10.74	9.81	
	12RB-Low (0)	1880 (18900)	11.93	10.90	9.82	
		1852.5 (18625)	11.78	10.71	9.75	
		1907.5 (19175)	11.72	10.72	9.65	
	25RB (0)	1880 (18900)	11.87	10.82	9.71	
		1852.5 (18625)	12.00	10.88	9.82	
		1905 (19150)	12.89	11.95	10.88	
	10MHz	1RB-High (49)	1880 (18900)	12.74	11.96	11.00
			1855 (18650)	12.61	11.99	10.87
			1905 (19150)	12.83	12.07	10.98
		1RB-Middle (24)	1880 (18900)	12.92	12.09	11.07
			1855 (18650)	12.75	12.15	10.98
			1905 (19150)	12.68	11.94	10.93
		1RB-Low (0)				

		1880 (18900)	12.73	12.14	10.85
		1855 (18650)	12.70	12.07	10.99
		1905 (19150)	11.62	10.82	9.83
	25RB-High (25)	1880 (18900)	11.80	10.89	9.85
		1855 (18650)	11.80	10.92	9.73
		1905 (19150)	12.02	10.80	9.78
	25RB-Middle (12)	1880 (18900)	11.89	10.97	9.99
		1855 (18650)	11.79	10.78	9.89
		1905 (19150)	11.95	10.87	9.77
	25RB-Low (0)	1880 (18900)	11.97	10.84	10.01
		1855 (18650)	11.75	10.79	9.71
		1905 (19150)	11.90	10.76	9.79
	50RB (0)	1880 (18900)	11.85	10.70	9.75
		1855 (18650)	11.82	10.90	9.69
		1902.5 (19125)	12.80	11.92	10.96
15MHz	1RB-High (74)	1880 (18900)	12.76	11.76	10.92
		1857.5 (18675)	12.70	12.04	10.78
		1902.5 (19125)	12.88	12.11	10.93
	1RB-Middle (37)	1880 (18900)	12.84	12.19	10.95
		1857.5 (18675)	12.78	12.07	11.04
		1902.5 (19125)	12.89	11.95	10.71
	1RB-Low (0)	1880 (18900)	12.76	12.14	10.94
		1857.5 (18675)	12.89	11.95	10.88
		1902.5 (19125)	11.74	10.74	9.87
	36RB-High (38)	1880 (18900)	11.91	10.88	9.86
		1857.5 (18675)	11.79	10.76	9.91
		1902.5 (19125)	11.93	10.69	9.79
	36RB-Middle (19)	1880 (18900)	11.79	10.91	9.93
		1857.5 (18675)	11.94	10.94	9.80
		1902.5 (19125)	11.90	10.74	9.86
36RB-Low (0)	1880 (18900)	11.91	10.93	10.03	
	1857.5 (18675)	11.98	10.81	9.69	
	1902.5 (19125)	11.71	10.80	9.85	
75RB (0)	1880 (18900)	11.75	10.85	9.86	
	1857.5 (18675)	11.92	10.87	9.64	
	1900 (19100)	12.80	12.00	10.90	
20MHz	1RB-High (99)	1880 (18900)	12.79	11.89	10.95
		1860 (18700)	12.75	12.09	10.81
		1900 (19100)	12.79	12.06	10.99
	1RB-Middle (50)	1880 (18900)	12.87	12.18	11.02
		1860 (18700)	12.85	12.11	11.01
		1900 (19100)	12.81	11.93	10.86

		1880 (18900)	12.80	12.10	10.94
		1860 (18700)	12.85	12.04	10.99
	50RB-High (50)	1900 (19100)	11.69	10.81	9.77
		1880 (18900)	11.87	10.80	9.81
		1860 (18700)	11.87	10.91	9.83
	50RB-Middle (25)	1900 (19100)	11.92	10.83	9.84
		1880 (18900)	11.93	10.91	9.95
		1860 (18700)	11.89	10.87	9.89
	50RB-Low (0)	1900 (19100)	11.88	10.88	9.88
		1880 (18900)	11.91	10.94	9.95
		1860 (18700)	11.88	10.80	9.79
	100RB (0)	1900 (19100)	11.86	10.79	9.78
		1880 (18900)	11.90	10.82	9.79
		1860 (18700)	11.91	10.85	9.78

LTE B2-ANT1 (Power Level D1/E1)

LTE B2-ANT1						
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	
1.4MHz	1RB-High (5)	1909.3 (19193)	10.75	10.16	8.87	
		1880 (18900)	10.89	10.11	9.03	
		1850.7 (18607)	10.86	10.02	8.94	
	1RB-Middle (3)	1909.3 (19193)	11.02	10.10	8.91	
		1880 (18900)	10.88	10.25	8.95	
		1850.7 (18607)	10.93	10.08	9.07	
	1RB-Low (0)	1909.3 (19193)	10.88	10.21	9.04	
		1880 (18900)	10.81	10.09	8.84	
		1850.7 (18607)	10.86	10.27	8.92	
	3RB-High (3)	1909.3 (19193)	10.93	10.18	8.88	
		1880 (18900)	10.78	10.15	8.99	
		1850.7 (18607)	10.82	10.03	8.88	
	3RB-Middle (1)	1909.3 (19193)	10.93	10.08	9.09	
		1880 (18900)	10.86	10.28	9.03	
		1850.7 (18607)	10.90	10.21	8.99	
	3RB-Low (0)	1909.3 (19193)	10.88	10.04	8.90	
		1880 (18900)	10.89	10.16	8.92	
		1850.7 (18607)	10.87	10.26	9.03	
	6RB (0)	1909.3 (19193)	9.96	8.95	7.87	
		1880 (18900)	9.86	8.90	8.02	
		1850.7 (18607)	10.02	8.92	7.83	
	3MHz	1RB-High (14)	1908.5 (19185)	10.83	10.04	8.95
			1880 (18900)	10.81	10.18	8.94

		1851.5 (18615)	10.91	10.11	8.98
	1RB-Middle (7)	1908.5 (19185)	10.97	10.00	8.95
		1880 (18900)	10.92	10.16	9.09
		1851.5 (18615)	10.89	10.21	9.04
	1RB-Low (0)	1908.5 (19185)	10.79	10.06	8.99
		1880 (18900)	10.91	9.98	8.95
		1851.5 (18615)	10.90	10.26	8.97
	8RB-High (7)	1908.5 (19185)	9.97	8.77	7.90
		1880 (18900)	9.92	8.78	7.95
		1851.5 (18615)	10.12	8.94	7.99
	8RB-Middle (4)	1908.5 (19185)	9.89	8.92	7.85
		1880 (18900)	9.86	8.96	8.06
		1851.5 (18615)	9.96	8.93	8.00
	8RB-Low (0)	1908.5 (19185)	10.05	8.88	7.92
		1880 (18900)	10.82	8.93	7.85
		1851.5 (18615)	9.78	8.85	7.91
	15RB (0)	1908.5 (19185)	9.90	8.87	7.87
		1880 (18900)	9.79	8.95	7.87
		1851.5 (18615)	9.91	8.94	7.99
5MHz	1RB-High (24)	1907.5 (19175)	10.80	10.03	8.97
		1880 (18900)	10.84	10.18	9.05
		1852.5 (18625)	10.80	10.03	8.93
	1RB-Middle (12)	1907.5 (19175)	10.87	10.06	8.94
		1880 (18900)	10.87	10.27	8.98
		1852.5 (18625)	10.91	10.01	8.92
	1RB-Low (0)	1907.5 (19175)	10.87	10.07	8.93
		1880 (18900)	10.83	10.16	8.94
		1852.5 (18625)	10.91	10.11	9.00
	12RB-High (13)	1907.5 (19175)	9.90	8.79	7.99
		1880 (18900)	9.88	8.93	7.80
		1852.5 (18625)	10.09	8.98	7.90
	12RB-Middle (6)	1907.5 (19175)	9.94	8.96	7.88
		1880 (18900)	9.87	8.95	7.90
		1852.5 (18625)	10.02	8.86	7.95
	12RB-Low (0)	1907.5 (19175)	10.00	8.87	8.02
		1880 (18900)	10.86	8.85	7.90
		1852.5 (18625)	9.94	8.93	8.10
25RB (0)	1907.5 (19175)	9.91	8.93	7.89	
	1880 (18900)	9.83	8.94	8.00	
	1852.5 (18625)	9.85	8.75	7.83	
10MHz	1RB-High (49)	1905 (19150)	10.92	10.18	8.99
		1880 (18900)	10.83	10.10	8.91

		1855 (18650)	10.74	9.94	9.01
	1RB-Middle (24)	1905 (19150)	11.01	10.19	9.10
		1880 (18900)	10.85	10.28	9.03
		1855 (18650)	10.93	10.20	8.91
	1RB-Low (0)	1905 (19150)	10.85	10.03	9.03
		1880 (18900)	10.93	10.10	8.83
		1855 (18650)	10.77	10.10	9.01
	25RB-High (25)	1905 (19150)	9.95	8.82	7.99
		1880 (18900)	9.97	8.83	7.97
		1855 (18650)	10.07	8.82	7.96
	25RB-Middle (12)	1905 (19150)	9.98	8.90	7.88
		1880 (18900)	9.95	8.96	7.90
		1855 (18650)	9.85	8.83	8.00
	25RB-Low (0)	1905 (19150)	9.97	9.01	7.96
		1880 (18900)	10.95	8.87	8.03
		1855 (18650)	9.90	8.80	7.99
	50RB (0)	1905 (19150)	10.04	8.88	7.99
		1880 (18900)	9.79	8.96	8.03
		1855 (18650)	10.00	8.86	7.97
15MHz	1RB-High (74)	1902.5 (19125)	10.90	10.08	9.00
		1880 (18900)	10.72	10.04	8.86
		1857.5 (18675)	10.81	10.13	8.91
	1RB-Middle (37)	1902.5 (19125)	10.97	10.08	8.95
		1880 (18900)	10.95	10.31	9.03
		1857.5 (18675)	10.97	10.07	9.03
	1RB-Low (0)	1902.5 (19125)	10.77	10.18	9.01
		1880 (18900)	10.83	10.16	8.83
		1857.5 (18675)	10.91	10.24	8.97
	36RB-High (38)	1902.5 (19125)	9.97	8.83	7.85
		1880 (18900)	9.94	8.96	7.81
		1857.5 (18675)	10.09	8.86	8.00
	36RB-Middle (19)	1902.5 (19125)	10.00	8.93	8.02
		1880 (18900)	9.92	8.85	8.06
		1857.5 (18675)	10.04	8.83	8.06
	36RB-Low (0)	1902.5 (19125)	9.96	8.84	8.06
		1880 (18900)	10.86	8.98	7.94
		1857.5 (18675)	9.78	8.96	8.04
75RB (0)	1902.5 (19125)	9.99	8.96	7.90	
	1880 (18900)	9.76	9.00	7.91	
	1857.5 (18675)	9.84	8.83	7.85	
20MHz	1RB-High (99)	1900 (19100)	10.88	10.13	8.96
		1880 (18900)	10.85	10.17	9.00

		1860 (18700)	10.87	10.08	9.00
	1RB-Middle (50)	1900 (19100)	10.98	10.15	9.05
		1880 (18900)	11.00	10.30	9.05
		1860 (18700)	10.99	10.16	9.05
	1RB-Low (0)	1900 (19100)	10.92	10.18	9.03
		1880 (18900)	10.89	10.12	8.94
		1860 (18700)	10.89	10.22	9.07
	50RB-High (50)	1900 (19100)	9.98	8.91	7.98
		1880 (18900)	9.94	8.91	7.94
		1860 (18700)	10.08	8.95	8.05
	50RB-Middle (25)	1900 (19100)	9.98	8.99	8.00
		1880 (18900)	9.98	8.91	8.05
		1860 (18700)	10.00	8.98	8.09
	50RB-Low (0)	1900 (19100)	10.03	8.98	8.07
		1880 (18900)	10.91	8.95	7.99
		1860 (18700)	9.89	8.91	8.06
	100RB (0)	1900 (19100)	10.00	8.92	7.98
		1880 (18900)	9.90	8.97	8.01
		1860 (18700)	9.99	8.90	7.98

LTE B7 (Power Level A1)

LTE B7					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2567.5 (21425)	23.87	22.96	21.94
		2535 (21100)	23.82	22.94	21.95
		2502.5 (20775)	23.94	22.91	21.93
	1RB-Middle (12)	2567.5 (21425)	23.91	22.95	21.94
		2535 (21100)	23.83	22.94	21.94
		2502.5 (20775)	23.98	23.00	21.93
	1RB-Low (0)	2567.5 (21425)	23.92	22.94	21.90
		2535 (21100)	23.90	22.93	21.89
		2502.5 (20775)	23.91	22.95	22.00
	12RB-High (13)	2567.5 (21425)	22.83	21.79	20.81
		2535 (21100)	22.72	21.71	20.68
		2502.5 (20775)	22.96	21.88	20.88
	12RB-Middle (6)	2567.5 (21425)	22.83	21.87	20.76
		2535 (21100)	22.82	21.77	20.70
		2502.5 (20775)	22.90	21.84	20.86
	12RB-Low (0)	2567.5 (21425)	22.89	21.85	20.78
		2535 (21100)	22.79	21.85	20.73
		2502.5 (20775)	22.97	21.90	20.84

		2567.5 (21425)	22.80	21.82	20.83	
	25RB (0)	2535 (21100)	22.78	21.69	20.67	
		2502.5 (20775)	22.98	21.88	20.86	
10MHz	1RB-High (49)	2565 (21400)	23.81	22.96	21.98	
		2535 (21100)	23.78	22.90	21.88	
		2505 (20800)	23.96	22.91	21.86	
	1RB-Middle (24)	2565 (21400)	23.84	22.93	21.97	
		2535 (21100)	23.81	22.93	21.82	
		2505 (20800)	24.00	22.94	21.83	
	1RB-Low (0)	2565 (21400)	23.84	23.00	21.85	
		2535 (21100)	23.76	22.93	21.79	
		2505 (20800)	23.93	23.00	21.76	
	25RB-High (25)	2565 (21400)	22.75	21.82	20.71	
		2535 (21100)	22.75	21.68	20.65	
		2505 (20800)	22.87	21.87	20.82	
	25RB-Middle (12)	2565 (21400)	22.84	21.85	20.77	
		2535 (21100)	22.73	21.75	20.66	
		2505 (20800)	22.88	21.85	20.84	
	25RB-Low (0)	2565 (21400)	22.82	21.88	20.84	
		2535 (21100)	22.78	21.82	20.72	
		2505 (20800)	22.94	21.89	20.85	
	50RB (0)	2565 (21400)	22.83	21.84	20.83	
		2535 (21100)	22.83	21.77	20.72	
		2505 (20800)	22.94	21.86	20.85	
	15MHz	1RB-High (74)	2562.5 (21375)	23.81	22.93	21.90
			2535 (21100)	23.79	22.97	21.83
			2507.5 (20825)	23.85	23.00	21.93
		1RB-Middle (37)	2562.5 (21375)	23.89	22.93	21.89
			2535 (21100)	23.84	22.94	21.97
			2507.5 (20825)	23.92	22.96	21.98
1RB-Low (0)		2562.5 (21375)	23.84	22.97	21.93	
		2535 (21100)	23.83	23.00	21.95	
		2507.5 (20825)	23.95	22.96	21.93	
36RB-High (38)		2562.5 (21375)	22.87	21.81	20.83	
		2535 (21100)	22.70	21.76	20.74	
		2507.5 (20825)	22.85	21.82	20.84	
36RB-Middle (19)		2562.5 (21375)	22.79	21.81	20.81	
		2535 (21100)	22.80	21.80	20.71	
		2507.5 (20825)	22.93	21.84	20.86	
36RB-Low (0)		2562.5 (21375)	22.79	21.84	20.80	
		2535 (21100)	22.84	21.83	20.80	
		2507.5 (20825)	22.97	21.95	20.87	

	75RB (0)	2562.5 (21375)	22.87	21.78	20.74
		2535 (21100)	22.78	21.75	20.72
		2507.5 (20825)	22.93	21.88	20.80
20MHz	1RB-High (99)	2560 (21350)	23.79	22.97	21.94
		2535 (21100)	23.76	22.90	21.93
		2510 (20850)	23.70	22.94	21.80
	1RB-Middle (50)	2560 (21350)	23.92	22.94	21.99
		2535 (21100)	23.82	22.95	21.80
		2510 (20850)	23.88	22.96	21.92
	1RB-Low (0)	2560 (21350)	23.84	22.97	21.92
		2535 (21100)	23.74	22.98	21.79
		2510 (20850)	23.77	22.90	21.84
	50RB-High (50)	2560 (21350)	22.82	21.80	20.79
		2535 (21100)	22.70	21.74	20.65
		2510 (20850)	22.80	21.81	20.73
	50RB-Middle (25)	2560 (21350)	22.94	21.88	20.85
		2535 (21100)	22.83	21.84	20.73
		2510 (20850)	22.82	21.73	20.71
	50RB-Low (0)	2560 (21350)	22.86	21.86	20.87
		2535 (21100)	22.86	21.87	20.80
		2510 (20850)	22.74	21.80	20.71
	100RB (0)	2560 (21350)	22.82	21.79	20.81
		2535 (21100)	22.77	21.76	20.72
		2510 (20850)	22.77	21.74	20.71

LTE B7 (Power Level B1)

LTE B7					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2567.5 (21425)	13.42	12.80	11.58
		2535 (21100)	13.26	12.76	11.56
		2502.5 (20775)	13.48	12.47	11.50
	1RB-Middle (12)	2567.5 (21425)	13.70	12.34	11.88
		2535 (21100)	13.50	12.68	11.50
		2502.5 (20775)	13.40	12.85	11.47
	1RB-Low (0)	2567.5 (21425)	13.35	12.76	11.57
		2535 (21100)	13.30	12.71	11.49
		2502.5 (20775)	13.34	12.74	11.59
	12RB-High (13)	2567.5 (21425)	12.51	11.58	10.54
		2535 (21100)	12.49	11.43	10.43
		2502.5 (20775)	12.73	11.65	10.54
12RB-Middle (6)	2567.5 (21425)	12.57	11.52	10.45	

		2535 (21100)	12.68	11.54	10.39	
		2502.5 (20775)	12.60	11.27	10.23	
		2567.5 (21425)	12.68	11.73	10.51	
	12RB-Low (0)		2535 (21100)	12.52	11.46	10.45
			2502.5 (20775)	12.40	11.54	10.39
			2567.5 (21425)	12.65	11.66	10.63
	25RB (0)		2535 (21100)	12.54	11.35	10.38
			2502.5 (20775)	12.62	11.41	10.38
			2567.5 (21425)	12.65	11.66	10.63
10MHz	1RB-High (49)	2565 (21400)	13.56	12.76	11.60	
		2535 (21100)	13.05	12.68	11.75	
		2505 (20800)	13.25	12.67	11.55	
	1RB-Middle (24)	2565 (21400)	13.52	12.38	11.84	
		2535 (21100)	13.62	12.74	11.46	
		2505 (20800)	13.35	12.63	11.76	
	1RB-Low (0)	2565 (21400)	13.55	12.80	11.71	
		2535 (21100)	13.32	12.65	11.63	
		2505 (20800)	13.37	12.62	11.54	
	25RB-High (25)	2565 (21400)	12.46	11.69	10.76	
		2535 (21100)	12.39	11.56	10.44	
		2505 (20800)	12.51	11.63	10.34	
	25RB-Middle (12)	2565 (21400)	12.68	11.60	10.61	
		2535 (21100)	12.46	11.63	10.46	
		2505 (20800)	12.46	11.30	10.37	
	25RB-Low (0)	2565 (21400)	12.66	11.58	10.47	
		2535 (21100)	12.54	11.60	10.67	
		2505 (20800)	12.27	11.49	10.30	
	50RB (0)	2565 (21400)	12.60	11.62	10.60	
		2535 (21100)	12.51	11.51	10.65	
		2505 (20800)	12.64	11.40	10.46	
	15MHz	1RB-High (74)	2562.5 (21375)	13.52	12.65	11.58
			2535 (21100)	13.15	12.73	11.70
			2507.5 (20825)	13.31	12.60	11.64
		1RB-Middle (37)	2562.5 (21375)	13.55	12.20	11.77
			2535 (21100)	13.35	12.82	11.47
			2507.5 (20825)	13.39	12.88	11.65
		1RB-Low (0)	2562.5 (21375)	13.37	12.78	11.76
			2535 (21100)	13.41	12.68	11.65
			2507.5 (20825)	13.32	12.54	11.60
36RB-High (38)		2562.5 (21375)	12.57	11.52	10.55	
		2535 (21100)	12.49	11.47	10.34	
		2507.5 (20825)	12.43	11.44	10.36	
36RB-Middle (19)		2562.5 (21375)	12.56	11.47	10.44	

	36RB-Low (0)	2535 (21100)	12.63	11.50	10.45	
		2507.5 (20825)	12.48	11.33	10.37	
		2562.5 (21375)	12.62	11.52	10.43	
		2535 (21100)	12.60	11.52	10.55	
		2507.5 (20825)	12.48	11.37	10.34	
		2562.5 (21375)	12.50	11.58	10.42	
	75RB (0)	2535 (21100)	12.56	11.48	10.63	
		2507.5 (20825)	12.45	11.48	10.49	
		2562.5 (21375)	12.55	11.58	10.42	
	20MHz	1RB-High (99)	2560 (21350)	13.55	12.83	11.69
			2535 (21100)	13.16	12.78	11.65
			2510 (20850)	13.43	12.63	11.57
1RB-Middle (50)		2560 (21350)	13.66	12.39	11.85	
		2535 (21100)	13.53	12.75	11.61	
		2510 (20850)	13.48	12.79	11.67	
1RB-Low (0)		2560 (21350)	13.47	12.87	11.72	
		2535 (21100)	13.47	12.75	11.59	
		2510 (20850)	13.48	12.73	11.72	
50RB-High (50)		2560 (21350)	12.62	11.67	10.67	
		2535 (21100)	12.57	11.49	10.49	
		2510 (20850)	12.63	11.55	10.49	
50RB-Middle (25)		2560 (21350)	12.75	11.65	10.64	
		2535 (21100)	12.63	11.57	10.55	
		2510 (20850)	12.52	11.42	10.41	
50RB-Low (0)		2560 (21350)	12.71	11.69	10.61	
		2535 (21100)	12.61	11.61	10.61	
		2510 (20850)	12.47	11.48	10.45	
100RB (0)		2560 (21350)	12.62	11.57	10.58	
		2535 (21100)	12.55	11.52	10.56	
		2510 (20850)	12.56	11.52	10.47	

LTE B7 (Power Level C1/D1)

LTE B7					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2567.5 (21425)	11.53	10.73	9.65
		2535 (21100)	11.45	10.61	9.45
		2502.5 (20775)	11.32	10.51	9.36
	1RB-Middle (12)	2567.5 (21425)	11.48	10.77	9.68
		2535 (21100)	11.33	10.75	9.63
		2502.5 (20775)	11.43	10.74	9.71
	1RB-Low (0)	2567.5 (21425)	11.31	10.78	9.64
		2535 (21100)	11.47	10.64	9.52

		2502.5 (20775)	11.52	10.83	9.45
	12RB-High (13)	2567.5 (21425)	10.41	9.51	8.32
		2535 (21100)	10.48	9.39	8.40
		2502.5 (20775)	10.52	9.52	8.46
	12RB-Middle (6)	2567.5 (21425)	10.49	9.44	8.56
		2535 (21100)	10.50	9.46	8.49
		2502.5 (20775)	10.47	9.53	8.30
	12RB-Low (0)	2567.5 (21425)	10.62	9.57	8.38
		2535 (21100)	10.51	9.46	8.60
		2502.5 (20775)	10.35	9.48	8.34
	25RB (0)	2567.5 (21425)	10.48	9.34	8.61
		2535 (21100)	10.53	9.51	8.53
		2502.5 (20775)	10.42	9.34	8.34
10MHz	1RB-High (49)	2565 (21400)	11.36	10.61	9.56
		2535 (21100)	11.44	10.83	9.44
		2505 (20800)	11.38	10.54	9.58
	1RB-Middle (24)	2565 (21400)	11.57	10.73	9.62
		2535 (21100)	11.28	10.65	9.43
		2505 (20800)	11.34	10.78	9.56
	1RB-Low (0)	2565 (21400)	11.48	10.79	9.75
		2535 (21100)	11.28	10.69	9.35
		2505 (20800)	11.33	10.60	9.64
	25RB-High (25)	2565 (21400)	10.47	9.47	8.41
		2535 (21100)	10.30	9.36	8.38
		2505 (20800)	10.38	9.50	8.39
	25RB-Middle (12)	2565 (21400)	10.40	9.36	8.39
		2535 (21100)	10.46	9.53	8.40
		2505 (20800)	10.42	9.54	8.47
	25RB-Low (0)	2565 (21400)	10.62	9.60	8.59
		2535 (21100)	10.47	9.58	8.37
		2505 (20800)	10.41	9.60	8.52
	50RB (0)	2565 (21400)	10.42	9.50	8.38
		2535 (21100)	10.46	9.52	8.41
		2505 (20800)	10.57	9.55	8.56
15MHz	1RB-High (74)	2562.5 (21375)	11.37	10.57	9.55
		2535 (21100)	11.33	10.79	9.39
		2507.5 (20825)	11.25	10.59	9.50
	1RB-Middle (37)	2562.5 (21375)	11.55	10.72	9.53
		2535 (21100)	11.37	10.67	9.48
		2507.5 (20825)	11.39	10.74	9.51
	1RB-Low (0)	2562.5 (21375)	11.33	10.86	9.64
		2535 (21100)	11.26	10.72	9.53

		2507.5 (20825)	11.33	10.71	9.52
	36RB-High (38)	2562.5 (21375)	10.36	9.40	8.39
		2535 (21100)	10.51	9.29	8.36
		2507.5 (20825)	10.63	9.58	8.42
	36RB-Middle (19)	2562.5 (21375)	10.61	9.39	8.46
		2535 (21100)	10.48	9.48	8.51
		2507.5 (20825)	10.61	9.47	8.38
	36RB-Low (0)	2562.5 (21375)	10.38	9.47	8.58
		2535 (21100)	10.39	9.51	8.61
		2507.5 (20825)	10.55	9.53	8.52
	75RB (0)	2562.5 (21375)	10.47	9.38	8.60
		2535 (21100)	10.48	9.40	8.32
		2507.5 (20825)	10.56	9.55	8.53
20MHz	1RB-High (99)	2560 (21350)	11.48	10.67	9.58
		2535 (21100)	11.37	10.73	9.45
		2510 (20850)	11.34	10.65	9.49
	1RB-Middle (50)	2560 (21350)	11.50	10.74	9.63
		2535 (21100)	11.38	10.74	9.55
		2510 (20850)	11.48	10.74	9.62
	1RB-Low (0)	2560 (21350)	11.43	10.78	9.65
		2535 (21100)	11.37	10.68	9.45
		2510 (20850)	11.47	10.75	9.57
	50RB-High (50)	2560 (21350)	10.49	9.54	8.47
		2535 (21100)	10.43	9.36	8.37
		2510 (20850)	10.53	9.52	8.50
	50RB-Middle (25)	2560 (21350)	10.54	9.50	8.50
		2535 (21100)	10.45	9.47	8.42
		2510 (20850)	10.53	9.49	8.45
	50RB-Low (0)	2560 (21350)	10.53	9.52	8.49
		2535 (21100)	10.52	9.51	8.52
		2510 (20850)	10.47	9.50	8.48
	100RB (0)	2560 (21350)	10.47	9.46	8.51
		2535 (21100)	10.50	9.47	8.43
		2510 (20850)	10.51	9.49	8.49

LTE B7 (Power Level E1)

LTE B7						
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	
5MHz	1RB-High (24)	2567.5 (21425)	9.37	8.78	7.63	
		2535 (21100)	9.43	8.54	7.64	
		2502.5 (20775)	9.36	8.46	7.56	
	1RB-Middle (12)	2567.5 (21425)	9.52	8.78	7.60	
		2535 (21100)	9.37	8.75	7.68	
		2502.5 (20775)	9.52	8.62	7.59	
	1RB-Low (0)	2567.5 (21425)	9.39	8.63	7.81	
		2535 (21100)	9.22	8.42	7.51	
		2502.5 (20775)	9.43	8.66	7.68	
	12RB-High (13)	2567.5 (21425)	8.53	7.72	6.62	
		2535 (21100)	8.50	7.60	6.46	
		2502.5 (20775)	8.27	7.51	6.37	
	12RB-Middle (6)	2567.5 (21425)	8.52	7.66	6.52	
		2535 (21100)	8.43	7.49	6.48	
		2502.5 (20775)	8.53	7.49	6.45	
	12RB-Low (0)	2567.5 (21425)	8.55	7.75	6.76	
		2535 (21100)	8.43	7.62	6.48	
		2502.5 (20775)	8.31	7.37	6.50	
	25RB (0)	2567.5 (21425)	8.62	7.54	6.66	
		2535 (21100)	8.47	7.51	6.60	
		2502.5 (20775)	8.23	7.47	6.40	
	10MHz	1RB-High (49)	2565 (21400)	9.42	8.62	7.66
			2535 (21100)	9.28	8.59	7.65
			2505 (20800)	9.25	8.41	7.52
		1RB-Middle (24)	2565 (21400)	9.68	8.82	7.78
			2535 (21100)	9.42	8.71	7.53
			2505 (20800)	9.46	8.57	7.67
1RB-Low (0)		2565 (21400)	9.38	8.63	7.67	
		2535 (21100)	9.19	8.38	7.44	
		2505 (20800)	9.47	8.71	7.65	
25RB-High (25)		2565 (21400)	8.59	7.62	6.60	
		2535 (21100)	8.46	7.51	6.46	
		2505 (20800)	8.42	7.33	6.50	
25RB-Middle (12)		2565 (21400)	8.52	7.67	6.59	
		2535 (21100)	8.31	7.42	6.58	
		2505 (20800)	8.56	7.49	6.43	
25RB-Low (0)		2565 (21400)	8.52	7.68	6.78	
		2535 (21100)	8.46	7.48	6.54	

		2505 (20800)	8.48	7.39	6.44	
	50RB (0)	2565 (21400)	8.59	7.64	6.61	
		2535 (21100)	8.43	7.47	6.59	
		2505 (20800)	8.21	7.31	6.37	
15MHz	1RB-High (74)	2562.5 (21375)	9.53	8.62	7.52	
		2535 (21100)	9.31	8.55	7.57	
		2507.5 (20825)	9.39	8.44	7.58	
	1RB-Middle (37)	2562.5 (21375)	9.50	8.75	7.66	
		2535 (21100)	9.37	8.63	7.67	
		2507.5 (20825)	9.49	8.57	7.63	
	1RB-Low (0)	2562.5 (21375)	9.45	8.71	7.73	
		2535 (21100)	9.21	8.45	7.43	
		2507.5 (20825)	9.36	8.62	7.61	
	36RB-High (38)	2562.5 (21375)	8.45	7.57	6.52	
		2535 (21100)	8.50	7.58	6.35	
		2507.5 (20825)	8.44	7.38	6.50	
	36RB-Middle (19)	2562.5 (21375)	8.62	7.55	6.63	
		2535 (21100)	8.39	7.53	6.59	
		2507.5 (20825)	8.45	7.43	6.39	
	36RB-Low (0)	2562.5 (21375)	8.49	7.74	6.63	
		2535 (21100)	8.46	7.52	6.55	
		2507.5 (20825)	8.29	7.32	6.47	
	75RB (0)	2562.5 (21375)	8.62	7.55	6.59	
		2535 (21100)	8.53	7.54	6.60	
		2507.5 (20825)	8.21	7.44	6.52	
	20MHz	1RB-High (99)	2560 (21350)	9.52	8.75	7.65
			2535 (21100)	9.42	8.61	7.68
			2510 (20850)	9.36	8.54	7.62
1RB-Middle (50)		2560 (21350)	9.63	8.84	7.74	
		2535 (21100)	9.48	8.76	7.66	
		2510 (20850)	9.48	8.70	7.66	
1RB-Low (0)		2560 (21350)	9.51	8.68	7.78	
		2535 (21100)	9.28	8.50	7.56	
		2510 (20850)	9.49	8.67	7.71	
50RB-High (50)		2560 (21350)	8.55	7.67	6.62	
		2535 (21100)	8.49	7.58	6.50	
		2510 (20850)	8.39	7.46	6.47	
50RB-Middle (25)		2560 (21350)	8.59	7.69	6.66	
		2535 (21100)	8.46	7.56	6.54	
		2510 (20850)	8.51	7.53	6.53	
50RB-Low (0)		2560 (21350)	8.64	7.74	6.75	
		2535 (21100)	8.44	7.58	6.59	

		2510 (20850)	8.43	7.47	6.47
	100RB (0)	2560 (21350)	8.57	7.64	6.65
		2535 (21100)	8.50	7.53	6.56
		2510 (20850)	8.36	7.45	6.48

LTE B12 (Power Level A1)

LTE B12					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	715.3	23.76	22.94	21.96
		707.5	23.81	22.90	22.00
		699.7	23.79	22.93	21.89
	1RB-Middle (3)	715.3	23.80	23.07	21.84
		707.5	23.86	23.09	21.94
		699.7	23.81	23.03	21.93
	1RB-Low (0)	715.3	23.81	22.92	21.96
		707.5	23.84	22.99	21.88
		699.7	23.77	23.04	21.92
	3RB-High (3)	715.3	23.83	22.84	21.84
		707.5	23.87	22.81	21.86
		699.7	23.85	22.76	21.91
	3RB-Middle (1)	715.3	23.83	22.82	21.91
		707.5	23.79	22.84	21.92
		699.7	23.71	22.76	21.84
	3RB-Low (0)	715.3	23.79	22.84	21.80
		707.5	23.83	22.83	21.88
		699.7	23.80	22.83	21.84
	6RB (0)	715.3	22.87	21.91	20.76
		707.5	22.87	21.79	20.75
		699.7	22.81	21.78	20.68
3MHz	1RB-High (14)	714.5	23.81	23.02	21.87
		707.5	23.83	23.03	21.87
		700.5	23.83	22.95	21.89
	1RB-Middle (7)	714.5	23.89	23.00	22.10
		707.5	23.88	23.01	21.99
		700.5	23.87	23.03	21.97
	1RB-Low (0)	714.5	23.87	22.99	21.88
		707.5	23.81	23.06	21.98
		700.5	23.80	22.93	21.86
	8RB-High (7)	714.5	22.77	21.84	20.79
		707.5	22.80	21.78	20.77
		700.5	22.76	21.80	20.74

	8RB-Middle (4)	714.5	22.78	21.85	20.73	
		707.5	22.81	21.92	20.77	
		700.5	22.81	21.83	20.73	
	8RB-Low (0)	714.5	22.86	21.88	20.83	
		707.5	22.80	21.87	20.74	
		700.5	22.74	21.86	20.77	
	15RB (0)	714.5	22.81	21.84	20.75	
		707.5	22.80	21.79	20.72	
		700.5	22.78	21.78	20.74	
5MHz	1RB-High (24)	713.5	23.89	22.99	21.86	
		707.5	23.85	22.95	21.86	
		701.5	23.82	22.94	21.81	
	1RB-Middle (12)	713.5	23.93	23.12	21.94	
		707.5	23.88	23.11	21.94	
		701.5	23.79	22.94	22.01	
	1RB-Low (0)	713.5	23.91	22.95	21.93	
		707.5	23.89	23.01	21.91	
		701.5	23.83	22.96	21.86	
	12RB-High (13)	713.5	22.73	21.75	20.72	
		707.5	22.82	21.80	20.76	
		701.5	22.71	21.68	20.71	
	12RB-Middle (6)	713.5	22.82	21.79	20.82	
		707.5	22.81	21.76	20.78	
		701.5	22.77	21.72	20.70	
	12RB-Low (0)	713.5	22.83	21.85	20.84	
		707.5	22.86	21.84	20.79	
		701.5	22.82	21.73	20.73	
	25RB (0)	713.5	22.77	21.83	20.76	
		707.5	22.81	21.84	20.75	
		701.5	22.80	21.76	20.69	
	10MHz	1RB-High (49)	711	23.84	23.01	21.88
			707.5	23.84	23.06	21.92
			704	23.88	23.08	21.86
1RB-Middle (24)		711	23.93	23.14	21.99	
		707.5	23.94	23.14	22.00	
		704	23.95	23.15	21.87	
1RB-Low (0)		711	23.91	23.14	21.94	
		707.5	23.86	22.97	21.85	
		704	23.91	23.11	21.98	
25RB-High (25)		711	22.78	21.74	20.69	
		707.5	22.83	21.88	20.81	
		704	22.86	21.84	20.81	

	25RB-Middle (12)	711	22.83	21.83	20.74
		707.5	22.81	21.82	20.80
		704	22.84	21.87	20.76
	25RB-Low (0)	711	22.82	21.80	20.81
		707.5	22.83	21.84	20.78
		704	22.78	21.81	20.75
	50RB (0)	711	22.79	21.81	20.75
		707.5	22.87	21.85	21.78
		704	22.83	21.81	20.77

LTE B12 (Power Level B1/C1)

LTE B12						
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	
1.4MHz	1RB-High (5)	715.3	17.39	16.58	15.43	
		707.5	17.32	16.46	15.49	
		699.7	17.32	16.57	15.34	
	1RB-Middle (3)	715.3	17.68	16.86	15.51	
		707.5	17.36	16.80	15.67	
		699.7	17.43	16.82	15.54	
	1RB-Low (0)	715.3	17.39	16.90	15.79	
		707.5	17.43	16.89	15.54	
		699.7	17.55	16.80	15.51	
	3RB-High (3)	715.3	17.36	16.70	15.49	
		707.5	17.45	16.54	15.42	
		699.7	17.39	16.66	15.50	
	3RB-Middle (1)	715.3	17.60	16.71	15.61	
		707.5	17.42	16.69	15.69	
		699.7	17.66	16.92	15.56	
	3RB-Low (0)	715.3	17.39	16.76	15.54	
		707.5	17.31	16.75	15.55	
		699.7	17.40	16.77	15.45	
	6RB (0)	715.3	16.47	15.40	14.31	
		707.5	16.43	15.42	14.41	
		699.7	16.54	15.46	14.49	
	3MHz	1RB-High (14)	714.5	17.31	16.61	15.46
			707.5	17.43	16.64	15.60
			700.5	17.40	16.66	15.47
1RB-Middle (7)		714.5	17.49	16.65	15.46	
		707.5	17.54	16.62	15.72	
		700.5	17.57	17.03	15.49	
1RB-Low (0)		714.5	17.60	16.88	15.72	

		707.5	17.52	16.91	15.44	
		700.5	17.47	16.78	15.45	
		714.5	16.41	15.43	14.55	
	8RB-High (7)	707.5	16.29	15.29	14.34	
		700.5	16.52	15.38	14.40	
		714.5	16.34	15.33	14.57	
	8RB-Middle (4)	707.5	16.58	15.41	14.34	
		700.5	16.38	15.32	14.38	
		714.5	16.30	15.37	14.45	
	8RB-Low (0)	707.5	16.37	15.27	14.39	
		700.5	16.42	15.23	14.42	
		714.5	16.52	15.34	14.33	
	15RB (0)	707.5	16.45	15.46	14.46	
		700.5	16.40	15.50	14.32	
		713.5	17.44	16.55	15.52	
5MHz	1RB-High (24)	707.5	17.48	16.69	15.44	
		701.5	17.29	16.72	15.48	
		713.5	17.48	16.67	15.56	
	1RB-Middle (12)	707.5	17.45	16.67	15.54	
		701.5	17.56	16.86	15.49	
		713.5	17.52	16.91	15.70	
	1RB-Low (0)	707.5	17.40	16.81	15.53	
		701.5	17.40	16.80	15.42	
		713.5	16.34	15.31	14.45	
	12RB-High (13)	707.5	16.49	15.32	14.51	
		701.5	16.47	15.33	14.53	
		713.5	16.50	15.36	14.53	
	12RB-Middle (6)	707.5	16.44	15.29	14.27	
		701.5	16.37	15.41	14.37	
		713.5	16.48	15.46	14.53	
	12RB-Low (0)	707.5	16.44	15.32	14.34	
		701.5	16.37	15.42	14.50	
		713.5	16.44	15.37	14.49	
	25RB (0)	707.5	16.49	15.28	14.50	
		701.5	16.51	15.31	14.46	
		711	17.36	16.70	15.54	
	10MHz	1RB-High (49)	707.5	17.42	16.61	15.57
			704	17.33	16.62	15.47
			711	17.58	16.80	15.60
1RB-Middle (24)		707.5	17.50	16.73	15.66	
		704	17.56	16.93	15.63	
		711	17.51	16.83	15.69	
1RB-Low (0)		711	17.51	16.83	15.69	

		707.5	17.45	16.81	15.58
		704	17.46	16.71	15.56
25RB-High (25)		711	16.39	15.40	14.53
		707.5	16.40	15.41	14.45
		704	16.45	15.40	14.47
25RB-Middle (12)		711	16.49	15.43	14.48
		707.5	16.56	15.44	14.42
		704	16.42	15.44	14.49
25RB-Low (0)		711	16.43	15.44	14.46
		707.5	16.36	15.42	14.42
		704	16.43	15.36	14.49
50RB (0)		711	16.44	15.41	14.44
		707.5	16.39	15.39	14.45
		704	16.45	15.42	14.47

LTE B13 (Power Level A1)

LTE B13						
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	
5MHz	1RB-High (24)	784.5 (23255)	23.97	23.22	22.06	
		782 (23230)	23.97	23.20	22.13	
		779.5 (23205)	23.95	23.10	22.10	
	1RB-Middle (12)	784.5 (23255)	24.06	23.21	22.09	
		782 (23230)	24.02	23.25	22.06	
		779.5 (23205)	24.02	23.09	22.13	
	1RB-Low (0)	784.5 (23255)	24.04	23.20	22.14	
		782 (23230)	23.99	23.12	22.05	
		779.5 (23205)	24.05	23.20	22.12	
	12RB-High (13)	784.5 (23255)	22.91	21.92	20.92	
		782 (23230)	22.91	21.90	20.92	
		779.5 (23205)	22.93	21.88	20.87	
	12RB-Middle (6)	784.5 (23255)	22.95	21.90	20.89	
		782 (23230)	22.98	21.93	20.94	
		779.5 (23205)	22.91	21.85	20.86	
	12RB-Low (0)	784.5 (23255)	22.97	21.91	20.94	
		782 (23230)	23.04	21.96	20.97	
		779.5 (23205)	22.78	21.75	20.74	
	25RB (0)	784.5 (23255)	22.95	21.90	20.89	
		782 (23230)	22.96	21.98	20.91	
		779.5 (23205)	22.89	21.90	20.84	
	10MHz	1RB-High (49)	782 (23230)	23.91	23.13	22.07
		1RB-Middle (24)	782 (23230)	24.06	23.25	22.10

	1RB-Low (0)	782 (23230)	24.05	23.13	22.13
	25RB-High (25)	782 (23230)	22.93	21.94	20.92
	25RB-Middle (12)	782 (23230)	22.95	21.96	20.93
	25RB-Low (0)	782 (23230)	22.82	21.82	20.79
	50RB (0)	782 (23230)	22.90	21.90	20.84

LTE B13 (Power Level B1)

LTE B13						
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	
5MHz	1RB-High (24)	784.5 (23255)	20.00	19.33	18.00	
		782 (23230)	19.95	19.06	18.09	
		779.5 (23205)	20.06	19.14	17.99	
	1RB-Middle (12)	784.5 (23255)	19.92	19.16	17.86	
		782 (23230)	19.82	19.09	18.13	
		779.5 (23205)	19.97	19.26	18.09	
	1RB-Low (0)	784.5 (23255)	19.99	19.29	18.00	
		782 (23230)	19.93	19.21	17.93	
		779.5 (23205)	20.01	19.10	17.98	
	12RB-High (13)	784.5 (23255)	18.97	17.75	16.74	
		782 (23230)	18.77	17.79	16.81	
		779.5 (23205)	18.62	17.86	16.65	
	12RB-Middle (6)	784.5 (23255)	18.84	17.76	16.87	
		782 (23230)	18.89	17.96	16.83	
		779.5 (23205)	18.83	17.70	16.70	
	12RB-Low (0)	784.5 (23255)	18.85	17.98	16.76	
		782 (23230)	18.77	17.79	16.88	
		779.5 (23205)	18.63	17.79	16.57	
	25RB (0)	784.5 (23255)	18.77	17.83	16.88	
		782 (23230)	19.01	17.97	16.87	
		779.5 (23205)	18.83	17.79	16.58	
	10MHz	1RB-High (49)	782 (23230)	19.86	19.21	17.97
		1RB-Middle (24)	782 (23230)	19.89	19.18	18.08
		1RB-Low (0)	782 (23230)	19.92	19.18	18.04
25RB-High (25)		782 (23230)	18.85	17.88	16.83	
25RB-Middle (12)		782 (23230)	18.86	17.82	16.85	
25RB-Low (0)		782 (23230)	18.72	17.75	16.70	
50RB (0)		782 (23230)	18.85	17.81	16.74	

LTE B13 (Power Level C1)

LTE B13						
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	
5MHz	1RB-High (24)	784.5 (23255)	17.73	17.01	15.87	
		782 (23230)	17.73	16.99	15.84	
		779.5 (23205)	17.74	17.08	15.8	
	1RB-Middle (12)	784.5 (23255)	17.74	17.09	15.93	
		782 (23230)	17.78	17.04	15.86	
		779.5 (23205)	17.75	17.12	15.94	
	1RB-Low (0)	784.5 (23255)	17.7	17.1	15.98	
		782 (23230)	17.74	17.02	15.84	
		779.5 (23205)	17.73	17.01	15.86	
	12RB-High (13)	784.5 (23255)	16.69	15.66	14.7	
		782 (23230)	16.69	15.64	14.65	
		779.5 (23205)	16.68	15.65	14.66	
	12RB-Middle (6)	784.5 (23255)	16.71	15.64	14.68	
		782 (23230)	16.74	15.7	14.7	
		779.5 (23205)	16.65	15.63	14.61	
	12RB-Low (0)	784.5 (23255)	16.71	15.67	14.68	
		782 (23230)	16.7	15.69	14.74	
		779.5 (23205)	16.51	15.5	14.52	
	25RB (0)	784.5 (23255)	16.74	15.74	14.7	
		782 (23230)	16.72	15.73	14.71	
		779.5 (23205)	16.63	15.61	14.6	
	10MHz	1RB-High (49)	782 (23230)	17.68	16.92	15.89
		1RB-Middle (24)	782 (23230)	17.76	17.12	15.91
		1RB-Low (0)	782 (23230)	17.75	17.15	15.91
		25RB-High (25)	782 (23230)	16.66	15.72	14.7
		25RB-Middle (12)	782 (23230)	16.71	15.72	14.71
		25RB-Low (0)	782 (23230)	16.57	15.56	14.5
50RB (0)		782 (23230)	16.64	15.64	14.59	

LTE B25 (Power Level A1)

LTE B25					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1914.3 (26683)	24.18	23.27	22.29
		1882.5 (26365)	24.20	23.35	22.30
		1850.7 (26047)	24.17	23.37	22.25
	1RB-Middle (3)	1914.3 (26683)	24.17	23.41	22.35
		1882.5 (26365)	24.22	23.36	22.28

		1850.7 (26047)	24.19	23.35	22.29
	1RB-Low (0)	1914.3 (26683)	24.17	23.25	22.32
		1882.5 (26365)	24.20	23.42	22.22
		1850.7 (26047)	24.19	23.31	22.22
	3RB-High (3)	1914.3 (26683)	24.25	23.26	22.21
		1882.5 (26365)	24.19	23.20	22.21
		1850.7 (26047)	24.23	23.19	22.21
	3RB-Middle (1)	1914.3 (26683)	24.23	23.25	22.27
		1882.5 (26365)	24.23	23.21	22.23
		1850.7 (26047)	24.21	23.15	22.20
	3RB-Low (0)	1914.3 (26683)	24.20	23.24	22.21
		1882.5 (26365)	24.22	23.15	22.29
		1850.7 (26047)	24.22	23.19	22.21
	6RB (0)	1914.3 (26683)	23.22	22.20	21.13
		1882.5 (26365)	23.20	22.19	21.09
		1850.7 (26047)	23.19	22.21	21.12
3MHz	1RB-High (14)	1913.5 (26675)	24.24	23.26	22.30
		1882.5 (26365)	24.20	23.27	22.23
		1851.5 (26055)	24.21	23.31	22.33
	1RB-Middle (7)	1913.5 (26675)	24.23	23.40	22.37
		1882.5 (26365)	24.25	23.39	22.34
		1851.5 (26055)	24.20	23.44	22.31
	1RB-Low (0)	1913.5 (26675)	24.20	23.32	22.27
		1882.5 (26365)	24.22	23.41	22.35
		1851.5 (26055)	24.19	23.41	22.25
	8RB-High (7)	1913.5 (26675)	23.18	22.21	21.15
		1882.5 (26365)	23.16	22.21	21.14
		1851.5 (26055)	23.15	22.25	21.17
	8RB-Middle (4)	1913.5 (26675)	23.20	22.22	21.14
		1882.5 (26365)	23.18	22.20	21.10
		1851.5 (26055)	23.15	22.25	21.10
	8RB-Low (0)	1913.5 (26675)	23.19	22.25	21.18
		1882.5 (26365)	23.22	22.21	21.19
		1851.5 (26055)	23.18	22.16	21.13
15RB (0)	1913.5 (26675)	23.19	22.21	21.17	
	1882.5 (26365)	23.13	22.17	21.11	
	1851.5 (26055)	23.13	22.20	21.14	
5MHz	1RB-High (24)	1912.5 (26665)	24.22	23.43	22.31
		1882.5 (26365)	24.25	23.52	22.26
		1852.5 (26065)	24.22	23.34	22.32
	1RB-Middle (12)	1912.5 (26665)	24.27	23.35	22.30
		1882.5 (26365)	24.32	23.44	22.37

		1852.5 (26065)	24.30	23.48	22.33
	1RB-Low (0)	1912.5 (26665)	24.22	23.44	22.30
		1882.5 (26365)	24.28	23.51	22.35
		1852.5 (26065)	24.21	23.36	22.27
	12RB-High (13)	1912.5 (26665)	23.11	22.10	21.09
		1882.5 (26365)	23.17	22.16	21.14
		1852.5 (26065)	23.17	22.13	21.12
	12RB-Middle (6)	1912.5 (26665)	23.24	22.17	21.19
		1882.5 (26365)	23.19	22.17	21.18
		1852.5 (26065)	23.18	22.18	21.15
	12RB-Low (0)	1912.5 (26665)	23.28	22.26	21.28
		1882.5 (26365)	23.24	22.22	21.27
		1852.5 (26065)	23.19	22.13	21.14
	25RB (0)	1912.5 (26665)	23.21	22.22	21.19
		1882.5 (26365)	23.21	22.21	21.22
		1852.5 (26065)	23.17	22.18	21.11
10MHz	1RB-High (49)	1910 (26640)	24.22	23.38	22.29
		1882.5 (26365)	24.20	23.38	22.27
		1855 (26090)	24.22	23.40	22.30
	1RB-Middle (24)	1910 (26640)	24.24	23.44	22.30
		1882.5 (26365)	24.27	23.27	22.34
		1855 (26090)	24.26	23.40	22.34
	1RB-Low (0)	1910 (26640)	24.20	23.37	22.30
		1882.5 (26365)	24.27	23.34	22.28
		1855 (26090)	24.24	23.34	22.32
	25RB-High (25)	1910 (26640)	23.07	22.04	21.01
		1882.5 (26365)	23.14	22.17	21.17
		1855 (26090)	23.21	22.20	21.14
	25RB-Middle (12)	1910 (26640)	23.19	22.20	21.17
		1882.5 (26365)	23.18	22.20	21.20
		1855 (26090)	23.17	22.16	21.14
	25RB-Low (0)	1910 (26640)	23.29	22.29	21.23
		1882.5 (26365)	23.26	22.26	21.21
		1855 (26090)	23.10	22.11	21.10
50RB (0)	1910 (26640)	23.17	22.19	21.13	
	1882.5 (26365)	23.26	22.21	21.19	
	1855 (26090)	23.18	22.11	21.11	
15MHz	1RB-High (74)	1907.5 (26615)	24.18	23.28	22.24
		1882.5 (26365)	24.11	23.31	22.16
		1857.5 (26115)	24.10	23.39	22.24
	1RB-Middle (37)	1907.5 (26615)	24.19	23.26	22.23
		1882.5 (26365)	24.23	23.40	22.29

		1857.5 (26115)	24.22	23.39	22.31	
	1RB-Low (0)	1907.5 (26615)	24.11	23.35	22.19	
		1882.5 (26365)	24.20	23.35	22.31	
		1857.5 (26115)	24.16	23.36	22.25	
	36RB-High (38)	1907.5 (26615)	23.04	22.05	21.07	
		1882.5 (26365)	23.12	22.10	21.11	
		1857.5 (26115)	23.18	22.19	21.11	
	36RB-Middle (19)	1907.5 (26615)	23.17	22.14	21.15	
		1882.5 (26365)	23.18	22.16	21.14	
		1857.5 (26115)	23.17	22.14	21.16	
	36RB-Low (0)	1907.5 (26615)	23.15	22.19	21.10	
		1882.5 (26365)	23.24	22.17	21.20	
		1857.5 (26115)	23.10	22.12	21.10	
	75RB (0)	1907.5 (26615)	23.11	22.11	21.06	
		1882.5 (26365)	23.13	22.16	21.09	
		1857.5 (26115)	23.12	22.15	21.07	
	20MHz	1RB-High (99)	1905 (26590)	24.19	23.40	22.30
			1882.5 (26365)	24.17	23.29	22.22
			1860 (26140)	24.22	23.45	22.31
		1RB-Middle (50)	1905 (26590)	24.28	23.35	22.33
			1882.5 (26365)	24.31	23.48	22.35
1860 (26140)			24.33	23.53	22.33	
1RB-Low (0)		1905 (26590)	24.18	23.35	22.21	
		1882.5 (26365)	24.20	23.36	22.19	
		1860 (26140)	24.18	23.41	22.24	
50RB-High (50)		1905 (26590)	23.01	22.01	20.96	
		1882.5 (26365)	23.16	22.17	21.12	
		1860 (26140)	23.31	22.22	21.23	
50RB-Middle (25)		1905 (26590)	23.24	22.18	21.19	
		1882.5 (26365)	23.26	22.29	21.26	
		1860 (26140)	23.26	22.26	21.20	
50RB-Low (0)		1905 (26590)	23.21	22.20	21.15	
		1882.5 (26365)	23.29	22.26	21.26	
		1860 (26140)	23.22	22.15	21.16	
100RB (0)		1905 (26590)	23.11	22.07	21.05	
		1882.5 (26365)	23.22	22.15	21.14	
		1860 (26140)	23.24	22.18	21.14	

LTE B25 (Power Level B1)

LTE B25						
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	
1.4MHz	1RB-High (5)	1914.3 (26683)	14.68	14.16	12.86	
		1882.5 (26365)	14.85	14.02	12.86	
		1850.7 (26047)	14.93	14.29	13.12	
	1RB-Middle (3)	1914.3 (26683)	15.03	14.27	12.96	
		1882.5 (26365)	14.90	14.27	12.92	
		1850.7 (26047)	15.03	14.15	13.09	
	1RB-Low (0)	1914.3 (26683)	14.87	14.08	12.86	
		1882.5 (26365)	14.73	14.18	12.91	
		1850.7 (26047)	14.78	14.03	13.00	
	3RB-High (3)	1914.3 (26683)	13.82	12.67	11.78	
		1882.5 (26365)	13.81	12.91	11.96	
		1850.7 (26047)	13.96	13.10	11.95	
	3RB-Middle (1)	1914.3 (26683)	13.79	13.08	11.82	
		1882.5 (26365)	14.05	12.93	11.91	
		1850.7 (26047)	14.16	12.92	12.12	
	3RB-Low (0)	1914.3 (26683)	13.81	12.79	11.94	
		1882.5 (26365)	13.98	13.08	12.13	
		1850.7 (26047)	14.03	12.84	11.84	
	6RB (0)	1914.3 (26683)	13.99	12.65	11.95	
		1882.5 (26365)	14.08	12.84	12.03	
		1850.7 (26047)	14.11	13.06	11.72	
	3MHz	1RB-High (14)	1913.5 (26675)	14.70	14.21	13.05
			1882.5 (26365)	14.90	14.14	12.87
			1851.5 (26055)	14.85	14.29	13.10
		1RB-Middle (7)	1913.5 (26675)	14.99	14.41	13.13
			1882.5 (26365)	14.87	14.27	12.98
			1851.5 (26055)	15.06	14.26	13.21
1RB-Low (0)		1913.5 (26675)	14.84	14.26	13.02	
		1882.5 (26365)	14.90	14.12	13.00	
		1851.5 (26055)	14.68	14.24	12.90	
8RB-High (7)		1913.5 (26675)	13.59	12.68	11.61	
		1882.5 (26365)	14.03	13.01	11.83	
		1851.5 (26055)	14.04	12.90	12.04	
8RB-Middle (4)		1913.5 (26675)	13.83	13.04	12.03	
		1882.5 (26365)	13.84	13.16	12.07	
		1851.5 (26055)	13.99	13.06	12.03	
8RB-Low (0)		1913.5 (26675)	14.05	12.86	12.05	
		1882.5 (26365)	14.13	13.00	11.96	

		1851.5 (26055)	14.03	12.87	11.81	
	15RB (0)	1913.5 (26675)	13.98	12.70	11.83	
		1882.5 (26365)	13.83	13.03	11.90	
		1851.5 (26055)	13.96	12.93	11.97	
5MHz	1RB-High (24)	1912.5 (26665)	14.89	14.31	13.05	
		1882.5 (26365)	14.84	14.19	13.05	
		1852.5 (26065)	14.87	14.08	13.06	
	1RB-Middle (12)	1912.5 (26665)	15.00	14.36	13.13	
		1882.5 (26365)	14.96	14.44	13.00	
		1852.5 (26065)	14.88	14.21	13.00	
	1RB-Low (0)	1912.5 (26665)	14.77	14.26	12.89	
		1882.5 (26365)	14.93	14.11	12.95	
		1852.5 (26065)	14.91	14.09	13.09	
	12RB-High (13)	1912.5 (26665)	13.74	12.65	11.61	
		1882.5 (26365)	13.99	12.93	11.83	
		1852.5 (26065)	14.09	13.01	12.09	
	12RB-Middle (6)	1912.5 (26665)	13.82	12.82	12.00	
		1882.5 (26365)	14.03	13.08	12.06	
		1852.5 (26065)	14.06	12.95	11.88	
	12RB-Low (0)	1912.5 (26665)	13.90	12.85	11.94	
		1882.5 (26365)	13.93	12.94	11.95	
		1852.5 (26065)	13.82	12.82	11.96	
	25RB (0)	1912.5 (26665)	13.94	12.73	11.80	
		1882.5 (26365)	14.05	13.08	12.04	
		1852.5 (26065)	14.09	13.03	11.97	
	10MHz	1RB-High (49)	1910 (26640)	14.87	14.22	12.92
			1882.5 (26365)	14.91	14.30	13.04
			1855 (26090)	14.72	14.34	12.97
1RB-Middle (24)		1910 (26640)	15.02	14.25	13.15	
		1882.5 (26365)	14.95	14.44	13.08	
		1855 (26090)	14.89	14.27	13.24	
1RB-Low (0)		1910 (26640)	14.86	14.03	12.93	
		1882.5 (26365)	14.84	14.27	13.07	
		1855 (26090)	14.68	14.24	12.97	
25RB-High (25)		1910 (26640)	13.66	12.79	11.68	
		1882.5 (26365)	13.92	13.03	11.69	
		1855 (26090)	13.92	12.93	12.00	
25RB-Middle (12)		1910 (26640)	13.93	12.98	11.96	
		1882.5 (26365)	13.93	13.00	11.97	
		1855 (26090)	14.13	12.99	11.92	
25RB-Low (0)		1910 (26640)	13.85	12.78	11.79	
		1882.5 (26365)	13.94	12.95	11.94	

		1855 (26090)	13.87	12.90	11.84	
	50RB (0)	1910 (26640)	13.75	12.90	11.96	
		1882.5 (26365)	13.90	12.83	11.96	
		1855 (26090)	13.83	12.82	11.78	
15MHz	1RB-High (74)	1907.5 (26615)	14.96	14.33	12.88	
		1882.5 (26365)	14.73	14.16	13.09	
		1857.5 (26115)	14.88	14.12	13.04	
	1RB-Middle (37)	1907.5 (26615)	14.77	14.34	13.09	
		1882.5 (26365)	15.06	14.45	12.86	
		1857.5 (26115)	14.80	14.09	13.02	
	1RB-Low (0)	1907.5 (26615)	14.80	14.09	12.95	
		1882.5 (26365)	14.83	14.23	12.84	
		1857.5 (26115)	14.87	14.05	13.01	
	36RB-High (38)	1907.5 (26615)	13.61	12.68	11.74	
		1882.5 (26365)	13.80	13.01	11.96	
		1857.5 (26115)	14.13	13.08	12.07	
	36RB-Middle (19)	1907.5 (26615)	13.88	12.88	11.85	
		1882.5 (26365)	14.08	13.02	12.03	
		1857.5 (26115)	13.87	12.89	11.86	
	36RB-Low (0)	1907.5 (26615)	14.00	12.78	12.06	
		1882.5 (26365)	13.92	13.15	12.11	
		1857.5 (26115)	13.83	13.07	11.90	
	75RB (0)	1907.5 (26615)	13.85	12.86	11.69	
		1882.5 (26365)	14.04	12.90	11.97	
		1857.5 (26115)	14.01	12.84	11.96	
	20MHz	1RB-High (99)	1905 (26590)	14.83	14.23	12.99
			1882.5 (26365)	14.83	14.17	12.98
			1860 (26140)	14.87	14.23	13.03
1RB-Middle (50)		1905 (26590)	14.90	14.28	13.04	
		1882.5 (26365)	14.92	14.31	12.97	
		1860 (26140)	14.95	14.20	13.10	
1RB-Low (0)		1905 (26590)	14.83	14.18	12.87	
		1882.5 (26365)	14.88	14.24	12.99	
		1860 (26140)	14.78	14.16	13.00	
50RB-High (50)		1905 (26590)	13.69	12.73	11.72	
		1882.5 (26365)	13.94	12.95	11.84	
		1860 (26140)	14.03	13.01	11.95	
50RB-Middle (25)		1905 (26590)	13.94	12.94	11.89	
		1882.5 (26365)	13.99	13.06	12.05	
		1860 (26140)	14.01	12.97	12.00	
50RB-Low (0)	1905 (26590)	13.96	12.89	11.93		
	1882.5 (26365)	14.01	13.06	12.06		

		1860 (26140)	13.95	12.96	11.90
	100RB (0)	1905 (26590)	13.86	12.76	11.81
		1882.5 (26365)	13.97	12.94	11.96
		1860 (26140)	13.96	12.91	11.87

LTE B25 (Power Level C1)

LTE B25					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1914.3 (26683)	12.71	12.00	10.87
		1882.5 (26365)	12.71	11.97	10.98
		1850.7 (26047)	12.90	12.00	10.91
	1RB-Middle (3)	1914.3 (26683)	12.94	12.12	11.09
		1882.5 (26365)	13.02	12.19	11.10
		1850.7 (26047)	12.75	12.06	10.88
	1RB-Low (0)	1914.3 (26683)	12.87	11.93	10.86
		1882.5 (26365)	12.92	11.97	10.89
		1850.7 (26047)	12.75	12.09	10.96
	3RB-High (3)	1914.3 (26683)	12.83	12.22	10.80
		1882.5 (26365)	12.94	11.94	10.84
		1850.7 (26047)	12.86	12.13	10.95
	3RB-Middle (1)	1914.3 (26683)	12.91	12.23	10.94
		1882.5 (26365)	12.93	12.02	11.15
		1850.7 (26047)	12.81	12.16	11.06
	3RB-Low (0)	1914.3 (26683)	12.86	11.92	11.04
		1882.5 (26365)	12.85	12.04	10.85
		1850.7 (26047)	12.93	11.97	10.95
	6RB (0)	1914.3 (26683)	11.85	10.97	9.96
		1882.5 (26365)	12.01	10.90	9.77
		1850.7 (26047)	11.59	10.72	9.78
3MHz	1RB-High (14)	1913.5 (26675)	12.71	12.13	11.00
		1882.5 (26365)	12.84	11.99	10.82
		1851.5 (26055)	12.77	12.13	10.90
	1RB-Middle (7)	1913.5 (26675)	12.96	12.07	11.12
		1882.5 (26365)	12.85	12.15	11.07
		1851.5 (26055)	12.91	11.97	11.02
	1RB-Low (0)	1913.5 (26675)	12.86	11.94	10.86
		1882.5 (26365)	12.83	11.83	10.86
		1851.5 (26055)	12.84	11.94	10.83
	8RB-High (7)	1913.5 (26675)	11.56	10.59	9.70
		1882.5 (26365)	11.81	10.77	9.78
		1851.5 (26055)	11.96	11.06	10.01

	8RB-Middle (4)	1913.5 (26675)	11.83	10.88	9.75	
		1882.5 (26365)	11.99	10.83	9.89	
		1851.5 (26055)	12.00	10.79	9.95	
	8RB-Low (0)	1913.5 (26675)	11.91	10.74	9.75	
		1882.5 (26365)	11.88	10.99	10.00	
		1851.5 (26055)	11.91	10.79	9.79	
	15RB (0)	1913.5 (26675)	11.84	10.68	9.64	
		1882.5 (26365)	11.82	10.95	9.71	
		1851.5 (26055)	11.82	10.73	9.82	
5MHz	1RB-High (24)	1912.5 (26665)	12.87	12.01	11.01	
		1882.5 (26365)	12.94	11.96	10.99	
		1852.5 (26065)	12.77	12.19	11.05	
	1RB-Middle (12)	1912.5 (26665)	12.83	12.10	10.95	
		1882.5 (26365)	12.95	12.05	10.97	
		1852.5 (26065)	12.80	12.02	11.01	
	1RB-Low (0)	1912.5 (26665)	12.80	11.94	11.05	
		1882.5 (26365)	12.80	11.89	10.87	
		1852.5 (26065)	12.72	12.11	11.01	
	12RB-High (13)	1912.5 (26665)	11.75	10.74	9.64	
		1882.5 (26365)	11.67	10.94	9.72	
		1852.5 (26065)	11.87	10.95	9.79	
	12RB-Middle (6)	1912.5 (26665)	11.92	10.96	9.87	
		1882.5 (26365)	11.80	10.92	9.75	
		1852.5 (26065)	11.91	10.98	9.81	
	12RB-Low (0)	1912.5 (26665)	11.81	10.90	9.79	
		1882.5 (26365)	11.97	10.86	9.89	
		1852.5 (26065)	11.81	10.93	9.78	
	25RB (0)	1912.5 (26665)	11.79	10.76	9.78	
		1882.5 (26365)	11.95	10.99	9.93	
		1852.5 (26065)	11.85	10.80	9.89	
	10MHz	1RB-High (49)	1910 (26640)	12.81	12.04	10.86
			1882.5 (26365)	12.86	12.06	11.07
			1855 (26090)	12.93	12.16	10.86
1RB-Middle (24)		1910 (26640)	12.85	12.13	10.98	
		1882.5 (26365)	13.00	12.08	10.93	
		1855 (26090)	12.95	12.02	11.02	
1RB-Low (0)		1910 (26640)	12.70	11.95	11.03	
		1882.5 (26365)	12.71	11.82	10.87	
		1855 (26090)	12.82	11.96	10.78	
25RB-High (25)		1910 (26640)	11.60	10.72	9.59	
		1882.5 (26365)	11.88	10.88	9.88	
		1855 (26090)	11.88	10.83	10.01	

	25RB-Middle (12)	1910 (26640)	11.77	10.73	9.76
		1882.5 (26365)	11.80	10.82	9.96
		1855 (26090)	11.77	10.97	9.83
	25RB-Low (0)	1910 (26640)	11.77	10.80	9.76
		1882.5 (26365)	11.88	11.05	9.87
		1855 (26090)	11.93	10.83	9.97
	50RB (0)	1910 (26640)	11.62	10.76	9.82
		1882.5 (26365)	11.89	10.95	9.92
		1855 (26090)	11.71	10.72	9.76
15MHz	1RB-High (74)	1907.5 (26615)	12.86	12.08	10.82
		1882.5 (26365)	12.69	12.03	10.94
		1857.5 (26115)	12.83	12.06	11.08
	1RB-Middle (37)	1907.5 (26615)	12.85	12.12	11.00
		1882.5 (26365)	12.98	12.06	11.05
		1857.5 (26115)	12.85	12.17	11.01
	1RB-Low (0)	1907.5 (26615)	12.79	12.09	11.01
		1882.5 (26365)	12.85	11.93	10.84
		1857.5 (26115)	12.72	11.99	10.97
	36RB-High (38)	1907.5 (26615)	11.61	10.63	9.68
		1882.5 (26365)	11.71	10.87	9.77
		1857.5 (26115)	11.85	10.88	9.79
	36RB-Middle (19)	1907.5 (26615)	11.87	10.75	9.79
		1882.5 (26365)	11.98	10.80	9.93
		1857.5 (26115)	11.79	10.83	9.88
	36RB-Low (0)	1907.5 (26615)	11.89	10.72	9.71
		1882.5 (26365)	11.93	10.82	9.96
		1857.5 (26115)	11.89	10.90	9.81
	75RB (0)	1907.5 (26615)	11.66	10.84	9.61
		1882.5 (26365)	11.87	10.93	9.87
		1857.5 (26115)	11.77	10.75	9.74
20MHz	1RB-High (99)	1905 (26590)	12.80	12.14	10.93
		1882.5 (26365)	12.84	11.99	10.97
		1860 (26140)	12.84	12.15	10.99
	1RB-Middle (50)	1905 (26590)	12.88	12.22	11.03
		1882.5 (26365)	12.92	12.12	11.05
		1860 (26140)	12.90	12.11	10.97
	1RB-Low (0)	1905 (26590)	12.80	12.04	10.97
		1882.5 (26365)	12.85	11.94	10.97
		1860 (26140)	12.86	12.07	10.93
	50RB-High (50)	1905 (26590)	11.68	10.68	9.66
		1882.5 (26365)	11.82	10.84	9.81
		1860 (26140)	11.96	10.98	9.92

	50RB-Middle (25)	1905 (26590)	11.90	10.86	9.84
		1882.5 (26365)	11.95	10.95	9.89
		1860 (26140)	11.92	10.93	9.90
	50RB-Low (0)	1905 (26590)	11.92	10.84	9.85
		1882.5 (26365)	11.99	10.97	9.93
		1860 (26140)	11.95	10.86	9.92
	100RB (0)	1905 (26590)	11.74	10.74	9.72
		1882.5 (26365)	11.89	10.90	9.86
		1860 (26140)	11.85	10.85	9.87

LTE B26 (Power Level A1)

LTE B26						
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	
1.4MHz	1RB-High (5)	848.3 (27033)	24.15	23.17	22.13	
		831.5 (26865)	24.21	23.38	22.32	
		814.7 (26697)	24.17	23.34	22.30	
	1RB-Middle (3)	848.3 (27033)	24.16	23.28	22.28	
		831.5 (26865)	24.28	23.47	22.24	
		814.7 (26697)	24.26	23.49	22.29	
	1RB-Low (0)	848.3 (27033)	24.17	23.28	22.24	
		831.5 (26865)	24.24	23.28	22.33	
		814.7 (26697)	24.23	23.47	22.30	
	3RB-High (3)	848.3 (27033)	24.20	23.23	22.22	
		831.5 (26865)	24.15	23.16	22.21	
		814.7 (26697)	24.22	23.09	22.19	
	3RB-Middle (1)	848.3 (27033)	24.16	23.15	22.27	
		831.5 (26865)	24.21	23.21	22.24	
		814.7 (26697)	24.25	23.19	22.29	
	3RB-Low (0)	848.3 (27033)	24.18	23.15	22.21	
		831.5 (26865)	24.25	23.21	22.27	
		814.7 (26697)	24.21	23.21	22.20	
	6RB (0)	848.3 (27033)	23.15	22.15	21.03	
		831.5 (26865)	23.22	22.27	21.06	
		814.7 (26697)	23.22	22.23	21.12	
	3MHz	1RB-High (14)	847.5 (27025)	24.11	23.25	22.20
			831.5 (26865)	24.17	23.39	22.30
			815.5 (26705)	24.08	23.32	22.25
1RB-Middle (7)		847.5 (27025)	24.13	23.27	22.22	
		831.5 (26865)	24.20	23.40	22.38	
		815.5 (26705)	24.11	23.35	22.31	
1RB-Low (0)		847.5 (27025)	24.11	23.41	22.18	

		831.5 (26865)	24.21	23.41	22.32	
		815.5 (26705)	24.03	23.28	22.11	
		847.5 (27025)	23.12	22.12	21.06	
	8RB-High (7)	831.5 (26865)	23.10	22.22	21.14	
		815.5 (26705)	23.05	22.15	21.06	
		847.5 (27025)	23.11	22.18	21.19	
	8RB-Middle (4)	831.5 (26865)	23.22	22.19	21.14	
		815.5 (26705)	23.10	22.12	21.06	
		847.5 (27025)	23.16	22.17	21.05	
	8RB-Low (0)	831.5 (26865)	23.12	22.20	21.15	
		815.5 (26705)	23.06	22.05	21.06	
		847.5 (27025)	23.10	22.13	21.04	
	15RB (0)	831.5 (26865)	23.17	22.18	21.15	
		815.5 (26705)	23.06	22.05	21.03	
		846.5 (27015)	24.20	23.28	22.25	
5MHz	1RB-High (24)	831.5 (26865)	24.21	23.35	22.33	
		816.5 (26715)	24.24	23.30	22.33	
		846.5 (27015)	24.14	23.30	22.24	
	1RB-Middle (12)	831.5 (26865)	24.31	23.38	22.32	
		816.5 (26715)	24.25	23.37	22.30	
		846.5 (27015)	24.24	23.39	22.36	
	1RB-Low (0)	831.5 (26865)	24.24	23.41	22.24	
		816.5 (26715)	24.28	23.51	22.36	
		846.5 (27015)	23.11	22.11	21.09	
	12RB-High (13)	831.5 (26865)	23.17	22.04	21.08	
		816.5 (26715)	23.17	22.18	21.15	
		846.5 (27015)	23.13	22.11	21.13	
	12RB-Middle (6)	831.5 (26865)	23.19	22.12	21.14	
		816.5 (26715)	23.22	22.22	21.12	
		846.5 (27015)	23.24	22.17	21.15	
	12RB-Low (0)	831.5 (26865)	23.17	22.13	21.13	
		816.5 (26715)	23.21	22.13	21.18	
		846.5 (27015)	23.18	22.18	21.14	
	25RB (0)	831.5 (26865)	23.18	22.15	21.12	
		816.5 (26715)	23.19	22.13	21.15	
		844 (26990)	24.16	23.31	22.22	
	10MHz	1RB-High (49)	831.5 (26865)	24.23	23.37	22.24
			820 (26750)	24.25	23.40	22.25
			844 (26990)	24.28	23.46	22.39
		1RB-Middle (24)	831.5 (26865)	24.31	23.40	22.38
			820 (26750)	24.29	23.42	22.34
			844 (26990)	24.28	23.37	22.32
1RB-Low (0)		844 (26990)	24.28	23.37	22.32	

		831.5 (26865)	24.29	23.43	22.45
		820 (26750)	24.26	23.35	22.30
		844 (26990)	23.14	22.08	21.04
	25RB-High (25)	831.5 (26865)	23.19	22.08	21.08
		820 (26750)	23.27	22.26	21.21
		844 (26990)	23.18	22.19	21.11
	25RB-Middle (12)	831.5 (26865)	23.20	22.14	21.14
		820 (26750)	23.26	22.20	21.17
		844 (26990)	23.26	22.29	21.22
	25RB-Low (0)	831.5 (26865)	23.23	22.16	21.21
		820 (26750)	23.15	22.18	21.09
		844 (26990)	23.29	22.11	21.19
	50RB (0)	831.5 (26865)	23.24	22.19	21.14
		820 (26750)	23.25	22.19	21.12
		841.5 (26965)	23.82	22.92	21.93
15MHz	1RB-High (74)	831.5 (26865)	23.86	23.13	21.99
		821.5 (26765)	23.91	23.13	21.98
		841.5 (26965)	23.95	23.14	22.04
	1RB-Middle (37)	831.5 (26865)	23.98	23.11	22.06
		821.5 (26765)	24.01	23.18	22.11
		841.5 (26965)	23.92	23.06	21.98
	1RB-Low (0)	831.5 (26865)	23.95	23.10	22.01
		821.5 (26765)	23.97	23.20	21.98
		841.5 (26965)	22.85	21.80	20.83
	36RB-High (38)	831.5 (26865)	22.91	21.86	20.81
		821.5 (26765)	22.95	21.97	20.87
		841.5 (26965)	22.89	21.89	20.94
	36RB-Middle (19)	831.5 (26865)	22.94	21.91	20.93
		821.5 (26765)	22.99	21.91	20.88
		841.5 (26965)	22.96	21.98	20.93
36RB-Low (0)	831.5 (26865)	22.93	21.94	20.96	
	821.5 (26765)	22.97	21.94	20.94	
	841.5 (26965)	22.91	21.85	20.84	
75RB (0)	831.5 (26865)	22.94	21.90	20.85	
	821.5 (26765)	22.89	21.93	20.91	

LTE B26 (Power Level B1)

LTE B26						
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	
1.4MHz	1RB-High (5)	848.3 (27033)	17.78	16.79	15.97	
		831.5 (26865)	17.57	16.62	15.77	
		814.7 (26697)	17.60	16.87	15.86	
	1RB-Middle (3)	848.3 (27033)	17.71	16.92	15.88	
		831.5 (26865)	17.85	16.87	15.79	
		814.7 (26697)	17.66	16.92	15.80	
	1RB-Low (0)	848.3 (27033)	17.74	17.05	16.04	
		831.5 (26865)	17.86	17.28	16.05	
		814.7 (26697)	17.67	17.16	15.96	
	3RB-High (3)	848.3 (27033)	17.63	16.67	16.04	
		831.5 (26865)	17.60	16.79	15.73	
		814.7 (26697)	17.72	16.88	16.06	
	3RB-Middle (1)	848.3 (27033)	17.71	17.05	15.94	
		831.5 (26865)	17.61	16.81	16.07	
		814.7 (26697)	17.78	16.99	15.90	
	3RB-Low (0)	848.3 (27033)	17.80	16.92	15.89	
		831.5 (26865)	17.82	17.28	15.90	
		814.7 (26697)	17.78	16.95	15.75	
	6RB (0)	848.3 (27033)	16.86	15.91	14.53	
		831.5 (26865)	16.91	15.77	14.64	
		814.7 (26697)	16.77	15.84	14.89	
	3MHz	1RB-High (14)	847.5 (27025)	17.58	16.64	15.91
			831.5 (26865)	17.63	16.66	15.92
			815.5 (26705)	17.61	16.81	16.06
		1RB-Middle (7)	847.5 (27025)	17.72	16.91	15.79
			831.5 (26865)	17.68	17.03	15.98
			815.5 (26705)	17.84	17.09	16.00
1RB-Low (0)		847.5 (27025)	17.72	17.10	15.90	
		831.5 (26865)	17.70	17.11	15.97	
		815.5 (26705)	17.86	16.95	15.94	
8RB-High (7)		847.5 (27025)	16.71	15.67	14.77	
		831.5 (26865)	16.71	15.73	14.82	
		815.5 (26705)	16.91	15.85	14.60	
8RB-Middle (4)		847.5 (27025)	16.87	15.84	14.66	
		831.5 (26865)	16.74	15.79	14.69	
		815.5 (26705)	16.57	15.69	14.80	
8RB-Low (0)		847.5 (27025)	16.67	15.59	14.80	
		831.5 (26865)	16.73	15.83	14.62	

		815.5 (26705)	16.76	15.69	14.69	
	15RB (0)	847.5 (27025)	16.67	15.81	14.52	
		831.5 (26865)	16.67	15.86	14.74	
		815.5 (26705)	16.71	15.69	14.69	
5MHz	1RB-High (24)	846.5 (27015)	17.70	16.78	16.06	
		831.5 (26865)	17.60	16.77	15.90	
		816.5 (26715)	17.67	16.82	15.81	
	1RB-Middle (12)	846.5 (27015)	17.67	17.11	15.88	
		831.5 (26865)	17.65	16.78	15.92	
		816.5 (26715)	17.82	17.00	15.73	
	1RB-Low (0)	846.5 (27015)	17.73	17.07	15.94	
		831.5 (26865)	17.65	17.23	16.04	
		816.5 (26715)	17.63	17.22	15.93	
	12RB-High (13)	846.5 (27015)	16.68	15.79	14.79	
		831.5 (26865)	16.74	15.47	14.77	
		816.5 (26715)	16.63	15.92	14.58	
	12RB-Middle (6)	846.5 (27015)	16.69	15.76	14.64	
		831.5 (26865)	16.70	15.82	14.81	
		816.5 (26715)	16.64	15.87	14.71	
	12RB-Low (0)	846.5 (27015)	16.67	15.59	14.68	
		831.5 (26865)	16.79	15.84	14.77	
		816.5 (26715)	16.68	15.71	14.84	
	25RB (0)	846.5 (27015)	16.80	15.85	14.54	
		831.5 (26865)	16.92	15.69	14.56	
		816.5 (26715)	16.77	15.60	14.89	
	10MHz	1RB-High (49)	844 (26990)	17.81	16.84	16.01
			831.5 (26865)	17.57	16.77	15.80
			820 (26750)	17.63	16.97	15.77
1RB-Middle (24)		844 (26990)	17.80	16.96	15.81	
		831.5 (26865)	17.67	16.99	15.99	
		820 (26750)	17.90	17.16	15.98	
1RB-Low (0)		844 (26990)	17.86	17.05	15.99	
		831.5 (26865)	17.91	17.19	15.92	
		820 (26750)	17.72	17.08	15.93	
25RB-High (25)		844 (26990)	16.64	15.76	14.63	
		831.5 (26865)	16.60	15.59	14.54	
		820 (26750)	16.81	15.91	14.78	
25RB-Middle (12)		844 (26990)	16.74	15.72	14.70	
		831.5 (26865)	16.84	15.66	14.88	
		820 (26750)	16.70	15.83	14.71	
25RB-Low (0)		844 (26990)	16.64	15.86	14.59	
		831.5 (26865)	16.92	15.93	14.86	

15MHz	50RB (0)	820 (26750)	16.74	15.87	14.72
		844 (26990)	16.85	15.76	14.53
		831.5 (26865)	16.79	15.77	14.85
		820 (26750)	16.83	15.83	14.86
	1RB-High (74)	841.5 (26965)	17.67	16.78	15.95
		831.5 (26865)	17.63	16.75	15.81
		821.5 (26765)	17.73	16.95	15.91
	1RB-Middle (37)	841.5 (26965)	17.76	17.01	15.92
		831.5 (26865)	17.73	16.93	15.92
		821.5 (26765)	17.76	17.04	15.87
	1RB-Low (0)	841.5 (26965)	17.72	17.03	15.92
		831.5 (26865)	17.77	17.14	15.96
		821.5 (26765)	17.73	17.08	15.82
	36RB-High (38)	841.5 (26965)	16.73	15.76	14.72
		831.5 (26865)	16.70	15.61	14.67
		821.5 (26765)	16.78	15.77	14.72
	36RB-Middle (19)	841.5 (26965)	16.75	15.69	14.73
		831.5 (26865)	16.74	15.78	14.74
		821.5 (26765)	16.71	15.79	14.76
	36RB-Low (0)	841.5 (26965)	16.71	15.73	14.73
		831.5 (26865)	16.84	15.80	14.72
		821.5 (26765)	16.67	15.72	14.72
	75RB (0)	841.5 (26965)	16.71	15.76	14.67
		831.5 (26865)	16.78	15.71	14.71
		821.5 (26765)	16.80	15.75	14.77

LTE B26 (Power Level C1)

LTE B26					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	848.3 (27033)	15.91	15.33	13.86
		831.5 (26865)	15.82	15.04	13.91
		814.7 (26697)	15.70	15.09	13.89
	1RB-Middle (3)	848.3 (27033)	15.94	15.23	13.98
		831.5 (26865)	15.97	15.38	13.90
		814.7 (26697)	15.93	15.12	14.17
	1RB-Low (0)	848.3 (27033)	15.81	15.20	14.10
		831.5 (26865)	15.96	15.07	14.13
		814.7 (26697)	15.82	15.06	14.17
3RB-High (3)	848.3 (27033)	15.77	15.26	13.83	
	831.5 (26865)	15.76	15.00	14.08	
	814.7 (26697)	15.77	15.03	13.85	

	3RB-Middle (1)	848.3 (27033)	16.03	15.26	14.20	
		831.5 (26865)	15.85	15.16	14.11	
		814.7 (26697)	15.89	15.33	14.13	
	3RB-Low (0)	848.3 (27033)	15.79	15.12	13.97	
		831.5 (26865)	15.96	15.16	13.91	
		814.7 (26697)	15.78	15.25	14.11	
	6RB (0)	848.3 (27033)	14.80	13.96	13.00	
		831.5 (26865)	14.96	14.05	12.89	
		814.7 (26697)	14.96	13.89	12.81	
3MHz	1RB-High (14)	847.5 (27025)	15.79	15.28	13.87	
		831.5 (26865)	15.80	14.92	14.08	
		815.5 (26705)	15.79	15.08	13.93	
	1RB-Middle (7)	847.5 (27025)	15.99	15.36	14.01	
		831.5 (26865)	15.90	15.29	13.92	
		815.5 (26705)	15.99	15.24	14.16	
	1RB-Low (0)	847.5 (27025)	15.88	15.09	14.17	
		831.5 (26865)	15.91	15.19	14.03	
		815.5 (26705)	15.91	15.24	13.95	
	8RB-High (7)	847.5 (27025)	14.88	13.72	12.86	
		831.5 (26865)	14.88	13.76	12.99	
		815.5 (26705)	14.84	13.84	13.02	
	8RB-Middle (4)	847.5 (27025)	15.00	13.77	13.01	
		831.5 (26865)	14.88	13.99	12.97	
		815.5 (26705)	14.75	13.92	13.01	
	8RB-Low (0)	847.5 (27025)	14.95	13.96	12.88	
		831.5 (26865)	14.90	13.80	12.92	
		815.5 (26705)	14.91	13.97	13.05	
	15RB (0)	847.5 (27025)	15.01	14.07	13.01	
		831.5 (26865)	15.02	13.87	13.00	
		815.5 (26705)	15.04	13.92	12.87	
	5MHz	1RB-High (24)	846.5 (27015)	15.72	15.16	13.97
			831.5 (26865)	15.81	15.13	14.01
			816.5 (26715)	15.70	15.16	14.02
1RB-Middle (12)		846.5 (27015)	16.04	15.27	14.06	
		831.5 (26865)	16.01	15.34	13.91	
		816.5 (26715)	15.98	15.21	13.99	
1RB-Low (0)		846.5 (27015)	15.77	15.11	14.02	
		831.5 (26865)	16.00	15.20	13.97	
		816.5 (26715)	15.98	15.14	14.00	
12RB-High (13)		846.5 (27015)	14.74	13.87	12.98	
		831.5 (26865)	14.71	13.91	12.84	
		816.5 (26715)	14.95	13.84	12.99	

	12RB-Middle (6)	846.5 (27015)	14.89	13.91	13.13	
		831.5 (26865)	14.83	13.99	12.92	
		816.5 (26715)	14.82	13.99	12.91	
	12RB-Low (0)	846.5 (27015)	15.00	13.98	13.07	
		831.5 (26865)	14.92	13.78	13.07	
		816.5 (26715)	14.74	13.95	12.92	
	25RB (0)	846.5 (27015)	14.98	13.89	13.05	
		831.5 (26865)	14.89	13.83	12.93	
		816.5 (26715)	14.92	13.91	12.81	
10MHz	1RB-High (49)	844 (26990)	15.73	15.19	13.90	
		831.5 (26865)	15.82	15.03	13.92	
		820 (26750)	15.77	15.19	13.87	
	1RB-Middle (24)	844 (26990)	15.99	15.32	14.07	
		831.5 (26865)	15.88	15.20	14.01	
		820 (26750)	15.81	15.16	14.16	
	1RB-Low (0)	844 (26990)	15.88	15.24	13.98	
		831.5 (26865)	15.94	15.21	14.07	
		820 (26750)	15.97	15.16	14.04	
	25RB-High (25)	844 (26990)	14.95	13.77	12.88	
		831.5 (26865)	14.92	13.87	12.97	
		820 (26750)	14.92	13.95	12.88	
	25RB-Middle (12)	844 (26990)	14.98	13.85	12.89	
		831.5 (26865)	14.88	13.98	13.05	
		820 (26750)	14.95	13.88	12.82	
	25RB-Low (0)	844 (26990)	14.97	13.82	12.96	
		831.5 (26865)	14.94	13.86	12.82	
		820 (26750)	14.88	13.90	12.81	
	50RB (0)	844 (26990)	15.04	14.02	13.09	
		831.5 (26865)	14.92	14.00	12.93	
		820 (26750)	14.91	13.83	13.06	
	15MHz	1RB-High (74)	841.5 (26965)	15.83	15.25	13.97
			831.5 (26865)	15.83	15.04	14.01
			822.5 (26775)	15.84	15.14	13.99
1RB-Middle (37)		841.5 (26965)	15.96	15.37	14.10	
		831.5 (26865)	15.93	15.29	14.05	
		822.5 (26775)	15.94	15.26	14.10	
1RB-Low (0)		841.5 (26965)	15.87	15.16	14.08	
		831.5 (26865)	15.92	15.16	14.05	
		822.5 (26775)	15.91	15.18	14.10	
36RB-High (38)		841.5 (26965)	14.88	13.87	12.96	
		831.5 (26865)	14.86	13.88	12.90	
		822.5 (26775)	14.91	13.91	13.02	

	36RB-Middle (19)	841.5 (26965)	14.92	13.91	13.03
		831.5 (26865)	14.92	13.95	12.98
		822.5 (26775)	14.89	13.90	12.95
	36RB-Low (0)	841.5 (26965)	14.95	13.90	13.02
		831.5 (26865)	14.94	13.91	12.97
		822.5 (26775)	14.89	13.90	12.95
	75RB (0)	841.5 (26965)	14.97	13.97	12.99
		831.5 (26865)	14.97	13.95	12.93
		822.5 (26775)	14.94	13.95	12.96

LTE B41 PC3 (Power Level A1)

LTE B41 PC3					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	23.56	22.57	21.25
		2640.3(41093)	23.64	22.61	21.34
		2593 (40620)	23.54	22.57	21.28
		2545.8(40148)	23.48	22.51	21.22
		2498.5 (39675)	23.48	22.66	21.24
	1RB-Middle (12)	2687.5 (41565)	23.62	22.58	21.28
		2640.3(41093)	23.63	22.62	21.31
		2593 (40620)	23.62	22.58	21.31
		2545.8(40148)	23.52	22.49	21.24
		2498.5 (39675)	23.54	22.66	21.27
	1RB-Low (0)	2687.5 (41565)	23.61	22.60	21.33
		2640.3(41093)	23.63	22.61	21.32
		2593 (40620)	23.61	22.65	21.35
		2545.8(40148)	23.45	22.45	21.19
		2498.5 (39675)	23.50	22.66	21.25
	12RB-High (13)	2687.5 (41565)	22.45	21.53	20.61
		2640.3(41093)	22.53	21.62	20.67
		2593 (40620)	22.42	21.52	20.59
		2545.8(40148)	22.38	21.49	20.54
		2498.5 (39675)	22.59	21.47	20.57
	12RB-Middle (6)	2687.5 (41565)	22.51	21.58	20.66
		2640.3(41093)	22.50	21.61	20.65
		2593 (40620)	22.49	21.61	20.65
		2545.8(40148)	22.41	21.51	20.57
		2498.5 (39675)	22.57	21.51	20.54
	12RB-Low (0)	2687.5 (41565)	22.51	21.60	20.66
		2640.3(41093)	22.54	21.65	20.70
		2593 (40620)	22.52	21.63	20.70

		2545.8(40148)	22.39	21.49	20.55
		2498.5 (39675)	22.61	21.52	20.60
	25RB (0)	2687.5 (41565)	22.55	21.68	20.71
		2640.3(41093)	22.57	21.72	20.77
		2593 (40620)	22.50	21.67	20.66
		2545.8(40148)	22.41	21.56	20.58
		2498.5 (39675)	22.60	21.57	20.60
10MHz	1RB-High (49)	2685 (41540)	23.53	22.52	21.23
		2639(41080)	23.59	22.56	21.29
		2593 (40620)	23.51	22.53	21.22
		2547(40160)	23.48	22.48	21.22
		2501 (39700)	23.42	22.59	21.17
	1RB-Middle (24)	2685 (41540)	23.62	22.62	21.31
		2639(41080)	23.59	22.61	21.32
		2593 (40620)	23.58	22.65	21.36
		2547(40160)	23.49	22.58	21.24
		2501 (39700)	23.49	22.66	21.25
	1RB-Low (0)	2685 (41540)	23.61	22.60	21.34
		2639(41080)	23.60	22.59	21.33
		2593 (40620)	23.62	22.62	21.35
		2547(40160)	23.44	22.49	21.19
		2501 (39700)	23.47	22.64	21.23
	25RB-High (25)	2685 (41540)	22.49	21.63	20.66
		2639(41080)	22.53	21.69	20.73
		2593 (40620)	22.48	21.65	20.69
		2547(40160)	22.42	21.59	20.63
		2501 (39700)	22.54	21.53	20.57
	25RB-Middle (12)	2685 (41540)	22.51	21.67	20.71
		2639(41080)	22.52	21.66	20.71
		2593 (40620)	22.52	21.68	20.72
		2547(40160)	22.44	21.56	20.63
		2501 (39700)	22.56	21.57	20.60
	25RB-Low (0)	2685 (41540)	22.57	21.69	20.75
		2639(41080)	22.53	21.68	20.74
		2593 (40620)	22.55	21.70	20.75
		2547(40160)	22.40	21.56	20.62
		2501 (39700)	22.56	21.55	20.55
	50RB (0)	2685 (41540)	22.58	21.71	20.68
		2639(41080)	22.57	21.75	20.71
		2593 (40620)	22.53	21.72	20.67
		2547(40160)	22.43	21.60	20.56
		2501 (39700)	22.57	21.59	20.55

15MHz	1RB-High (74)	2682.5 (41515)	23.44	22.45	21.19
		2637.8(41068)	23.47	22.51	21.24
		2593 (40620)	23.39	22.42	21.17
		2548.3(40173)	23.43	22.44	21.19
		2503.5 (39725)	23.34	22.54	21.10
	1RB-Middle (37)	2682.5 (41515)	23.58	22.58	21.31
		2637.8(41068)	23.56	22.60	21.32
		2593 (40620)	23.57	22.58	21.32
		2548.3(40173)	23.49	22.49	21.24
		2503.5 (39725)	23.44	22.62	21.18
	1RB-Low (0)	2682.5 (41515)	23.57	22.59	21.32
		2637.8(41068)	23.51	22.51	21.25
		2593 (40620)	23.57	22.59	21.33
		2548.3(40173)	23.37	22.38	21.14
		2503.5 (39725)	23.40	22.58	21.13
	36RB-High (38)	2682.5 (41515)	22.43	21.56	20.55
		2637.8(41068)	22.49	21.64	20.61
		2593 (40620)	22.41	21.57	20.55
		2548.3(40173)	22.40	21.54	20.53
		2503.5 (39725)	22.51	21.48	20.46
	36RB-Middle (19)	2682.5 (41515)	22.47	21.62	20.61
		2637.8(41068)	22.47	21.62	20.61
		2593 (40620)	22.50	21.62	20.63
		2548.3(40173)	22.39	21.55	20.55
		2503.5 (39725)	22.48	21.47	20.46
36RB-Low (0)	2682.5 (41515)	22.51	21.65	20.66	
	2637.8(41068)	22.48	21.65	20.65	
	2593 (40620)	22.48	21.66	20.64	
	2548.3(40173)	22.35	21.49	20.50	
	2503.5 (39725)	22.53	21.49	20.49	
75RB (0)	2682.5 (41515)	22.52	21.64	20.62	
	2637.8(41068)	22.56	21.70	20.67	
	2593 (40620)	22.50	21.67	20.64	
	2548.3(40173)	22.38	21.57	20.53	
	2503.5 (39725)	22.51	21.54	20.50	
20MHz	1RB-High (99)	2680 (41490)	23.41	22.40	21.12
		2636.5(41055)	23.47	22.48	21.24
		2593 (40620)	23.28	22.32	21.07
		2549.5(40185)	23.43	22.44	21.20
		2506 (39750)	23.21	22.43	20.97
	1RB-Middle (50)	2680 (41490)	23.55	22.55	21.28
		2636.5(41055)	23.63	22.65	21.39

		2593 (40620)	23.49	22.49	21.23
		2549.5(40185)	23.56	22.56	21.31
		2506 (39750)	23.34	22.52	21.06
	1RB-Low (0)	2680 (41490)	23.55	22.55	21.30
		2636.5(41055)	23.52	22.58	21.30
		2593 (40620)	23.50	22.53	21.26
		2549.5(40185)	23.40	22.43	21.18
		2506 (39750)	23.23	22.43	20.99
	50RB-High (50)	2680 (41490)	22.47	21.64	20.60
		2636.5(41055)	22.54	21.72	20.67
		2593 (40620)	22.38	21.56	20.55
		2549.5(40185)	22.50	21.68	20.62
		2506 (39750)	22.51	21.52	20.45
	50RB-Middle (25)	2680 (41490)	22.53	21.68	20.65
		2636.5(41055)	22.59	21.77	20.73
		2593 (40620)	22.44	21.65	20.60
		2549.5(40185)	22.51	21.69	20.67
		2506 (39750)	22.45	21.46	20.41
	50RB-Low (0)	2680 (41490)	22.54	21.72	20.69
		2636.5(41055)	22.61	21.77	20.73
		2593 (40620)	22.48	21.67	20.62
		2549.5(40185)	22.46	21.66	20.61
		2506 (39750)	22.42	21.45	20.39
	100RB (0)	2680 (41490)	22.51	21.69	20.63
		2636.5(41055)	22.59	21.73	20.69
2593 (40620)		22.44	21.64	20.57	
2549.5(40185)		22.48	21.64	20.63	
2506 (39750)		22.46	21.46	20.43	

LTE B41 PC3 (Power Level B1)

LTE B41 PC3					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	11.41	10.36	8.95
		2640.3(41093)	11.03	10.15	9.00
		2593 (40620)	10.99	10.55	8.94
		2545.8(40148)	11.42	10.56	9.32
		2498.5 (39675)	10.63	10.91	8.90
	1RB-Middle (12)	2687.5 (41565)	11.50	10.45	9.37
		2640.3(41093)	11.55	10.38	8.93
		2593 (40620)	11.69	10.66	9.42
		2545.8(40148)	11.63	10.53	9.18

		2498.5 (39675)	11.83	9.82	9.48
	1RB-Low (0)	2687.5 (41565)	11.50	10.55	9.11
		2640.3(41093)	11.54	10.35	9.06
		2593 (40620)	11.67	10.69	9.24
		2545.8(40148)	11.47	10.65	9.31
		2498.5 (39675)	11.55	10.77	9.46
	12RB-High (13)	2687.5 (41565)	10.45	8.91	8.65
		2640.3(41093)	10.17	9.44	8.18
		2593 (40620)	10.55	8.77	8.13
		2545.8(40148)	10.58	9.69	8.49
		2498.5 (39675)	10.89	9.97	7.95
	12RB-Middle (6)	2687.5 (41565)	10.55	9.59	8.65
		2640.3(41093)	10.18	9.48	8.41
		2593 (40620)	10.52	9.80	8.60
		2545.8(40148)	10.56	9.61	8.75
		2498.5 (39675)	10.91	9.85	8.92
	12RB-Low (0)	2687.5 (41565)	10.58	9.54	8.71
		2640.3(41093)	10.28	9.85	8.77
		2593 (40620)	10.47	9.67	8.75
		2545.8(40148)	10.43	9.18	8.61
2498.5 (39675)		10.77	8.95	8.92	
25RB (0)	2687.5 (41565)	10.54	9.71	8.49	
	2640.3(41093)	10.18	9.58	8.32	
	2593 (40620)	10.66	9.74	8.67	
	2545.8(40148)	10.42	8.76	8.60	
	2498.5 (39675)	10.77	9.03	8.86	
10MHz	1RB-High (49)	2685 (41540)	11.37	10.38	8.95
		2639(41080)	10.94	10.20	8.83
		2593 (40620)	10.89	10.47	8.95
		2547(40160)	11.40	10.36	9.25
		2501 (39700)	10.64	10.85	9.06
	1RB-Middle (24)	2685 (41540)	11.57	10.58	9.36
		2639(41080)	11.38	10.35	8.91
		2593 (40620)	11.59	10.77	9.46
		2547(40160)	11.64	10.65	9.30
		2501 (39700)	11.80	10.01	9.56
	1RB-Low (0)	2685 (41540)	11.40	10.55	9.24
		2639(41080)	11.42	10.33	8.96
		2593 (40620)	11.63	10.51	9.41
		2547(40160)	11.65	10.65	9.25
		2501 (39700)	11.66	10.80	9.59
	25RB-High (25)	2685 (41540)	10.50	8.88	8.43

		2639(41080)	10.28	9.39	8.38
		2593 (40620)	10.59	8.69	8.15
		2547(40160)	10.42	9.61	7.59
		2501 (39700)	10.67	9.92	7.90
		2685 (41540)	10.36	9.60	8.68
	25RB-Middle (12)	2639(41080)	10.18	9.51	8.27
		2593 (40620)	10.51	9.78	8.67
		2547(40160)	10.59	9.68	8.78
		2501 (39700)	10.75	10.04	8.79
		2685 (41540)	10.60	9.57	8.55
	25RB-Low (0)	2639(41080)	10.12	9.78	8.69
		2593 (40620)	10.65	9.83	8.77
		2547(40160)	10.52	9.12	8.76
		2501 (39700)	10.73	9.04	8.82
		2685 (41540)	10.41	9.55	8.54
	50RB (0)	2639(41080)	10.16	9.60	8.17
		2593 (40620)	10.57	9.76	8.70
		2547(40160)	10.60	8.75	8.70
		2501 (39700)	10.71	8.88	8.94
		2682.5 (41515)	11.42	10.46	8.92
15MHz	1RB-High (74)	2637.8(41068)	11.03	10.11	8.91
		2593 (40620)	10.78	10.46	9.04
		2548.3(40173)	11.32	10.48	9.32
		2503.5 (39725)	10.81	10.78	9.10
		2682.5 (41515)	11.47	10.43	9.36
	1RB-Middle (37)	2637.8(41068)	11.53	10.26	8.87
		2593 (40620)	11.66	10.75	9.43
		2548.3(40173)	11.52	10.70	9.38
		2503.5 (39725)	11.91	9.89	9.47
		2682.5 (41515)	11.31	10.38	9.16
	1RB-Low (0)	2637.8(41068)	11.47	10.24	9.06
		2593 (40620)	11.57	10.66	9.36
		2548.3(40173)	11.56	10.63	9.34
		2503.5 (39725)	11.77	10.62	9.56
		2682.5 (41515)	10.52	9.00	8.54
	36RB-High (38)	2637.8(41068)	10.15	9.29	8.28
		2593 (40620)	10.45	8.55	8.16
		2548.3(40173)	10.40	9.54	7.55
		2503.5 (39725)	10.69	9.88	7.84
		2682.5 (41515)	10.58	9.70	8.56
36RB-Middle (19)	2637.8(41068)	10.23	9.56	8.36	
	2593 (40620)	10.48	9.79	8.61	

	36RB-Low (0)	2548.3(40173)	10.55	9.67	8.55	
		2503.5 (39725)	10.73	9.98	8.94	
		2682.5 (41515)	10.45	9.60	8.68	
		2637.8(41068)	10.23	9.77	8.75	
		2593 (40620)	10.57	9.82	8.82	
		2548.3(40173)	10.60	9.34	8.74	
		2503.5 (39725)	10.72	8.86	8.76	
		75RB (0)	2682.5 (41515)	10.34	9.58	8.65
			2637.8(41068)	10.08	9.55	8.36
			2593 (40620)	10.60	9.73	8.57
	2548.3(40173)		10.54	8.77	8.67	
	2503.5 (39725)		10.71	8.95	8.83	
	20MHz	1RB-High (99)	2680 (41490)	11.37	10.47	9.02
			2636.5(41055)	11.08	10.15	8.95
			2593 (40620)	10.89	10.48	8.96
2549.5(40185)			11.42	10.50	9.22	
2506 (39750)			10.75	10.81	9.05	
1RB-Middle (50)		2680 (41490)	11.50	10.57	9.27	
		2636.5(41055)	11.52	10.29	8.99	
		2593 (40620)	11.64	10.71	9.37	
		2549.5(40185)	11.58	10.65	9.29	
		2506 (39750)	11.85	9.93	9.57	
1RB-Low (0)		2680 (41490)	11.42	10.48	9.21	
		2636.5(41055)	11.45	10.31	9.04	
		2593 (40620)	11.57	10.63	9.35	
		2549.5(40185)	11.56	10.61	9.32	
		2506 (39750)	11.69	10.76	9.50	
50RB-High (50)		2680 (41490)	10.49	8.92	8.57	
		2636.5(41055)	10.20	9.34	8.32	
		2593 (40620)	10.54	8.67	8.21	
		2549.5(40185)	10.51	9.66	7.64	
		2506 (39750)	10.81	9.94	7.91	
50RB-Middle (25)		2680 (41490)	10.50	9.66	8.61	
		2636.5(41055)	10.27	9.46	8.36	
		2593 (40620)	10.60	9.71	8.67	
		2549.5(40185)	10.62	9.73	8.69	
		2506 (39750)	10.82	9.95	8.91	
50RB-Low (0)		2680 (41490)	10.53	9.67	8.65	
		2636.5(41055)	10.24	9.85	8.79	
		2593 (40620)	10.60	9.75	8.73	
	2549.5(40185)	10.57	9.26	8.66		
	2506 (39750)	10.79	8.98	8.90		

	100RB (0)	2680 (41490)	10.49	9.62	8.62
		2636.5(41055)	10.21	9.57	8.32
		2593 (40620)	10.56	9.68	8.70
		2549.5(40185)	10.54	8.70	8.65
		2506 (39750)	10.79	8.96	8.85

LTE B41 PC3 (Power Level C1)

LTE B41 PC3					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	8.65	7.77	6.30
		2640.3(41093)	8.42	7.48	6.06
		2593 (40620)	8.81	7.82	6.57
		2545.8(40148)	8.88	7.71	6.51
		2498.5 (39675)	8.99	8.17	6.78
	1RB-Middle (12)	2687.5 (41565)	8.59	7.79	6.38
		2640.3(41093)	9.25	7.62	6.46
		2593 (40620)	8.92	8.00	6.78
		2545.8(40148)	8.86	7.98	6.52
		2498.5 (39675)	9.17	8.15	6.83
	1RB-Low (0)	2687.5 (41565)	8.73	7.66	6.28
		2640.3(41093)	8.86	7.85	6.31
		2593 (40620)	8.86	7.97	6.60
		2545.8(40148)	8.95	7.93	6.64
		2498.5 (39675)	9.06	8.09	6.74
	12RB-High (13)	2687.5 (41565)	7.79	6.65	5.77
		2640.3(41093)	7.58	6.67	5.66
		2593 (40620)	7.89	7.01	6.02
		2545.8(40148)	7.86	6.97	5.94
		2498.5 (39675)	8.06	7.32	6.19
	12RB-Middle (6)	2687.5 (41565)	7.72	6.85	5.72
		2640.3(41093)	8.09	6.75	5.81
		2593 (40620)	7.90	6.84	6.00
		2545.8(40148)	7.93	6.93	6.02
		2498.5 (39675)	8.19	7.31	6.29
	12RB-Low (0)	2687.5 (41565)	7.70	6.94	5.90
		2640.3(41093)	7.77	6.77	5.62
		2593 (40620)	8.01	7.04	5.85
		2545.8(40148)	7.95	6.98	5.88
		2498.5 (39675)	7.99	7.23	6.23
	25RB (0)	2687.5 (41565)	7.76	6.76	5.71
		2640.3(41093)	7.69	6.84	5.79

		2593 (40620)	7.86	6.97	5.84
		2545.8(40148)	7.98	7.00	5.73
		2498.5 (39675)	8.22	7.29	6.13
10MHz	1RB-High (49)	2685 (41540)	8.45	7.75	6.29
		2639(41080)	8.62	7.46	6.06
		2593 (40620)	8.86	7.87	6.48
		2547(40160)	8.82	7.89	6.51
		2501 (39700)	9.05	8.31	6.76
	1RB-Middle (24)	2685 (41540)	8.78	7.80	6.49
		2639(41080)	9.08	7.81	6.47
		2593 (40620)	9.08	8.05	6.77
		2547(40160)	8.90	7.87	6.57
		2501 (39700)	9.02	8.30	7.00
	1RB-Low (0)	2685 (41540)	8.67	7.69	6.31
		2639(41080)	8.86	7.92	6.47
		2593 (40620)	8.95	8.08	6.46
		2547(40160)	8.99	7.93	6.46
		2501 (39700)	8.97	8.09	6.63
	25RB-High (25)	2685 (41540)	7.88	6.82	5.77
		2639(41080)	7.78	6.71	5.66
		2593 (40620)	7.84	6.86	5.89
		2547(40160)	7.74	6.94	5.96
		2501 (39700)	8.17	7.33	6.31
	25RB-Middle (12)	2685 (41540)	7.70	6.78	5.72
		2639(41080)	8.06	6.80	5.84
		2593 (40620)	7.84	6.92	6.05
		2547(40160)	7.90	6.86	5.97
		2501 (39700)	8.21	7.16	6.35
	25RB-Low (0)	2685 (41540)	7.70	6.78	5.74
		2639(41080)	7.86	6.75	5.76
		2593 (40620)	8.04	6.92	6.04
		2547(40160)	7.82	6.97	5.88
		2501 (39700)	8.06	7.26	6.11
	50RB (0)	2685 (41540)	7.86	6.82	5.89
		2639(41080)	7.79	6.80	5.60
2593 (40620)		8.03	6.82	5.97	
2547(40160)		7.82	6.81	5.95	
2501 (39700)		8.24	7.26	6.21	
15MHz	1RB-High (74)	2682.5 (41515)	8.69	7.86	6.31
		2637.8(41068)	8.42	7.70	6.20
		2593 (40620)	8.84	7.77	6.48
		2548.3(40173)	8.93	7.92	6.38

		2503.5 (39725)	9.05	8.07	6.71
	1RB-Middle (37)	2682.5 (41515)	8.73	7.73	6.29
		2637.8(41068)	9.05	7.78	6.35
		2593 (40620)	9.07	7.99	6.53
		2548.3(40173)	8.88	8.03	6.44
		2503.5 (39725)	8.95	8.14	6.75
	1RB-Low (0)	2682.5 (41515)	8.81	7.86	6.30
		2637.8(41068)	8.79	7.69	6.38
		2593 (40620)	8.83	7.93	6.47
		2548.3(40173)	9.02	8.06	6.63
		2503.5 (39725)	9.17	8.12	6.59
	36RB-High (38)	2682.5 (41515)	7.90	6.89	5.80
		2637.8(41068)	7.70	6.69	5.76
		2593 (40620)	7.84	6.89	5.85
		2548.3(40173)	7.96	6.87	5.91
		2503.5 (39725)	8.01	7.19	6.11
	36RB-Middle (19)	2682.5 (41515)	7.78	6.82	5.69
		2637.8(41068)	8.01	6.76	5.78
		2593 (40620)	7.91	6.88	5.93
		2548.3(40173)	7.94	6.85	5.78
		2503.5 (39725)	8.19	7.32	6.16
	36RB-Low (0)	2682.5 (41515)	7.90	6.84	5.87
		2637.8(41068)	7.67	6.78	5.78
		2593 (40620)	7.84	7.00	5.88
		2548.3(40173)	7.96	6.92	6.02
		2503.5 (39725)	8.12	7.03	6.13
	75RB (0)	2682.5 (41515)	7.86	6.89	5.81
		2637.8(41068)	7.62	6.79	5.62
		2593 (40620)	7.93	7.03	5.84
		2548.3(40173)	7.84	6.96	5.92
		2503.5 (39725)	8.27	7.10	6.28
20MHz	1RB-High (99)	2680 (41490)	8.59	7.77	6.37
		2636.5(41055)	8.56	7.60	6.20
		2593 (40620)	8.83	7.90	6.48
		2549.5(40185)	8.83	7.85	6.44
		2506 (39750)	9.12	8.21	6.77
	1RB-Middle (50)	2680 (41490)	8.71	7.86	6.42
		2636.5(41055)	9.15	7.77	6.37
		2593 (40620)	9.01	8.05	6.68
		2549.5(40185)	8.94	8.02	6.57
		2506 (39750)	9.09	8.29	6.90
	1RB-Low (0)	2680 (41490)	8.74	7.77	6.40

		2636.5(41055)	8.80	7.84	6.43
		2593 (40620)	8.96	8.01	6.56
		2549.5(40185)	8.92	7.97	6.56
		2506 (39750)	9.09	8.11	6.67
		2680 (41490)	7.80	6.79	5.75
	50RB-High (50)	2636.5(41055)	7.72	6.71	5.73
		2593 (40620)	7.99	6.96	5.92
		2549.5(40185)	7.89	6.91	5.88
		2506 (39750)	8.13	7.29	6.25
		2680 (41490)	7.82	6.83	5.77
	50RB-Middle (25)	2636.5(41055)	8.16	6.78	5.74
		2593 (40620)	7.98	6.99	5.99
		2549.5(40185)	7.95	6.94	5.92
		2506 (39750)	8.11	7.31	6.25
		2680 (41490)	7.81	6.85	5.84
	50RB-Low (0)	2636.5(41055)	7.76	6.79	5.76
		2593 (40620)	7.96	6.98	5.98
		2549.5(40185)	7.96	6.96	5.97
		2506 (39750)	8.14	7.17	6.18
		2680 (41490)	7.76	6.80	5.81
100RB (0)	2636.5(41055)	7.71	6.74	5.71	
	2593 (40620)	7.98	6.97	5.97	
	2549.5(40185)	7.91	6.92	5.88	
	2506 (39750)	8.21	7.24	6.21	
	2680 (41490)	7.76	6.80	5.81	

LTE B41 PC2 (Power Level A1)

LTE B41 PC2					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	26.58	25.58	24.42
		2640.3(41093)	26.66	25.71	24.57
		2593 (40620)	26.58	24.70	24.45
		2545.8(40148)	26.52	25.63	24.43
		2498.5 (39675)	26.50	25.59	24.37
	1RB-Middle (12)	2687.5 (41565)	25.67	25.60	24.48
		2640.3(41093)	26.64	25.72	24.52
		2593 (40620)	25.70	25.70	24.52
		2545.8(40148)	26.56	24.67	24.44
		2498.5 (39675)	26.54	25.62	24.41
	1RB-Low (0)	2687.5 (41565)	26.63	25.64	24.50
		2640.3(41093)	26.64	24.74	24.56
		2593 (40620)	26.63	25.71	24.51

		2545.8(40148)	25.50	25.58	24.24
		2498.5 (39675)	26.52	25.62	24.36
	12RB-High (13)	2687.5 (41565)	25.52	24.49	22.60
		2640.3(41093)	25.56	23.58	22.63
		2593 (40620)	25.48	24.47	23.53
		2545.8(40148)	25.43	24.45	23.47
		2498.5 (39675)	25.41	24.45	23.47
	12RB-Middle (6)	2687.5 (41565)	25.54	24.53	23.59
		2640.3(41093)	24.61	24.56	23.61
		2593 (40620)	25.54	23.57	23.58
		2545.8(40148)	25.43	24.46	23.04
		2498.5 (39675)	25.42	24.01	23.47
	12RB-Low (0)	2687.5 (41565)	25.57	24.56	23.60
		2640.3(41093)	25.60	24.59	23.64
		2593 (40620)	24.59	24.59	22.67
		2545.8(40148)	25.43	24.46	23.49
		2498.5 (39675)	24.99	24.48	23.05
	25RB (0)	2687.5 (41565)	25.55	24.61	23.62
		2640.3(41093)	25.61	24.62	23.66
		2593 (40620)	24.56	24.56	23.60
2545.8(40148)		25.42	24.48	23.48	
2498.5 (39675)		25.39	24.50	23.50	
10MHz	1RB-High (49)	2685 (41540)	26.56	25.58	24.38
		2639(41080)	26.60	25.77	24.46
		2593 (40620)	25.56	25.65	24.41
		2547(40160)	26.53	25.66	24.36
		2501 (39700)	26.43	25.53	24.39
	1RB-Middle (24)	2685 (41540)	26.65	25.76	24.51
		2639(41080)	26.63	25.79	23.56
		2593 (40620)	26.63	25.73	24.51
		2547(40160)	25.58	25.67	24.47
		2501 (39700)	26.48	25.62	24.40
	1RB-Low (0)	2685 (41540)	26.64	25.69	24.51
		2639(41080)	25.68	25.76	24.52
		2593 (40620)	26.65	25.80	24.51
		2547(40160)	26.48	24.68	24.37
		2501 (39700)	26.47	24.62	24.36
	25RB-High (25)	2685 (41540)	25.09	24.57	23.60
		2639(41080)	24.61	24.61	23.64
		2593 (40620)	25.52	24.59	23.60
		2547(40160)	25.47	24.53	23.58
		2501 (39700)	25.39	24.00	23.47

	25RB-Middle (12)	2685 (41540)	25.57	24.60	22.65
		2639(41080)	25.57	23.69	23.64
		2593 (40620)	24.61	24.61	23.63
		2547(40160)	25.48	24.54	23.54
		2501 (39700)	25.46	24.44	23.50
	25RB-Low (0)	2685 (41540)	25.60	24.64	23.67
		2639(41080)	25.57	24.65	23.66
		2593 (40620)	25.61	24.20	23.66
		2547(40160)	25.46	24.51	22.55
		2501 (39700)	25.38	24.47	22.53
	50RB (0)	2685 (41540)	25.62	24.64	22.60
		2639(41080)	25.64	24.67	22.65
		2593 (40620)	25.62	24.19	23.58
		2547(40160)	25.50	24.51	23.47
		2501 (39700)	25.46	24.49	23.45
15MHz	1RB-High (74)	2682.5 (41515)	26.00	25.52	24.30
		2637.8(41068)	26.50	25.66	24.44
		2593 (40620)	26.44	25.58	24.45
		2548.3(40173)	26.44	25.59	24.40
		2503.5 (39725)	26.34	25.49	24.26
	1RB-Middle (37)	2682.5 (41515)	26.59	24.70	24.47
		2637.8(41068)	26.59	24.80	24.51
		2593 (40620)	26.58	25.73	24.49
		2548.3(40173)	25.54	25.66	24.40
		2503.5 (39725)	26.00	25.59	24.35
	1RB-Low (0)	2682.5 (41515)	26.60	25.72	24.48
		2637.8(41068)	26.54	25.69	24.45
		2593 (40620)	26.58	25.75	24.53
		2548.3(40173)	26.40	25.57	24.32
		2503.5 (39725)	26.39	24.55	24.29
	36RB-High (38)	2682.5 (41515)	25.51	24.49	23.02
		2637.8(41068)	25.54	24.55	23.55
		2593 (40620)	25.48	24.48	23.48
		2548.3(40173)	25.45	23.50	23.44
		2503.5 (39725)	25.36	23.51	23.39
	36RB-Middle (19)	2682.5 (41515)	25.55	24.55	23.55
		2637.8(41068)	25.54	24.53	22.56
		2593 (40620)	24.56	24.53	23.53
		2548.3(40173)	25.46	24.45	23.45
		2503.5 (39725)	25.36	24.38	23.36
	36RB-Low (0)	2682.5 (41515)	25.60	23.57	23.58
		2637.8(41068)	25.57	24.54	23.57

		2593 (40620)	25.58	24.57	23.58	
		2548.3(40173)	24.99	24.42	23.44	
		2503.5 (39725)	25.39	24.40	23.42	
	75RB (0)	2682.5 (41515)	25.59	23.60	23.56	
		2637.8(41068)	25.60	24.62	23.59	
		2593 (40620)	25.56	24.12	23.57	
		2548.3(40173)	25.49	24.47	23.44	
		2503.5 (39725)	25.40	24.40	22.94	
	20MHz	1RB-High (99)	2680 (41490)	26.35	25.48	24.24
			2636.5(41055)	26.45	25.60	24.39
			2593 (40620)	26.29	25.41	24.18
			2549.5(40185)	26.41	25.55	24.32
			2506 (39750)	26.20	25.36	24.10
		1RB-Middle (50)	2680 (41490)	26.50	25.62	24.41
			2636.5(41055)	26.60	25.74	24.51
2593 (40620)			26.45	25.59	24.38	
2549.5(40185)			26.54	25.66	24.44	
2506 (39750)			26.30	25.43	24.21	
1RB-Low (0)		2680 (41490)	26.51	25.65	24.41	
		2636.5(41055)	26.52	25.66	24.41	
		2593 (40620)	26.46	25.60	24.37	
		2549.5(40185)	26.40	26.16	24.32	
		2506 (39750)	26.20	25.31	24.08	
50RB-High (50)		2680 (41490)	25.48	24.50	23.48	
		2636.5(41055)	25.55	24.58	23.54	
		2593 (40620)	25.41	24.41	23.40	
		2549.5(40185)	25.51	24.53	23.49	
		2506 (39750)	25.34	24.37	23.33	
50RB-Middle (25)	2680 (41490)	25.52	24.54	23.53		
	2636.5(41055)	25.61	24.63	23.58		
	2593 (40620)	25.48	24.48	23.44		
	2549.5(40185)	25.53	24.57	23.53		
	2506 (39750)	25.29	24.32	23.29		
50RB-Low (0)	2680 (41490)	25.55	24.59	23.55		
	2636.5(41055)	25.59	24.63	23.57		
	2593 (40620)	25.47	24.51	23.48		
	2549.5(40185)	25.48	24.53	23.49		
	2506 (39750)	25.24	24.27	23.25		
100RB (0)	2680 (41490)	25.49	24.52	23.49		
	2636.5(41055)	25.55	24.60	23.56		
	2593 (40620)	25.42	24.47	23.45		
	2549.5(40185)	25.47	24.50	23.46		

		2506 (39750)	25.27	24.31	23.29
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LTE B41 PC2 (Power Level B1)

LTE B41 PC2					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	14.54	13.86	12.50
		2640.3(41093)	14.45	13.62	12.02
		2593 (40620)	14.52	13.85	12.27
		2545.8(40148)	14.46	13.46	12.21
		2498.5 (39675)	14.72	14.08	12.20
	1RB-Middle (12)	2687.5 (41565)	14.45	13.71	12.58
		2640.3(41093)	14.32	13.93	12.09
		2593 (40620)	14.58	13.99	12.53
		2545.8(40148)	14.66	13.67	12.40
		2498.5 (39675)	14.82	13.92	12.86
	1RB-Low (0)	2687.5 (41565)	14.54	13.83	12.39
		2640.3(41093)	14.18	13.48	12.07
		2593 (40620)	14.47	13.45	12.61
		2545.8(40148)	14.75	13.68	12.39
		2498.5 (39675)	14.65	14.12	12.77
	12RB-High (13)	2687.5 (41565)	13.43	12.48	11.35
		2640.3(41093)	13.15	12.09	11.36
		2593 (40620)	13.68	12.35	11.61
		2545.8(40148)	13.67	12.44	11.33
		2498.5 (39675)	13.82	12.71	11.18
	12RB-Middle (6)	2687.5 (41565)	13.55	12.71	11.52
		2640.3(41093)	13.31	12.30	11.35
		2593 (40620)	13.44	12.78	11.33
		2545.8(40148)	13.31	12.46	11.43
		2498.5 (39675)	13.94	12.88	11.74
	12RB-Low (0)	2687.5 (41565)	13.35	12.72	11.27
		2640.3(41093)	13.15	12.11	11.21
		2593 (40620)	13.53	12.63	11.65
		2545.8(40148)	13.70	12.79	11.17
		2498.5 (39675)	13.86	12.91	11.93
	25RB (0)	2687.5 (41565)	13.54	12.74	11.34
		2640.3(41093)	13.07	12.29	11.51
		2593 (40620)	13.50	12.71	11.32
		2545.8(40148)	13.61	12.73	11.32
		2498.5 (39675)	13.60	12.67	11.83
	10MHz	1RB-High (49)	2685 (41540)	14.55	13.87

		2639(41080)	14.15	13.39	12.18
		2593 (40620)	14.41	13.72	12.32
		2547(40160)	14.48	13.17	12.34
		2501 (39700)	14.59	13.91	12.32
	1RB-Middle (24)	2685 (41540)	14.66	13.89	12.56
		2639(41080)	14.27	13.91	12.09
		2593 (40620)	14.63	13.86	12.71
		2547(40160)	14.55	13.91	12.64
		2501 (39700)	14.96	14.17	12.71
	1RB-Low (0)	2685 (41540)	14.58	13.73	12.35
		2639(41080)	14.22	13.65	12.21
		2593 (40620)	14.61	13.47	12.71
		2547(40160)	14.50	13.99	12.36
		2501 (39700)	14.90	13.83	12.82
	25RB-High (25)	2685 (41540)	13.32	12.68	11.26
		2639(41080)	13.44	12.14	11.16
		2593 (40620)	13.44	12.26	11.47
		2547(40160)	13.59	12.66	11.51
		2501 (39700)	13.77	12.82	11.48
	25RB-Middle (12)	2685 (41540)	13.64	12.75	11.68
		2639(41080)	13.17	12.20	11.10
		2593 (40620)	13.55	12.53	11.40
		2547(40160)	13.02	12.50	11.57
		2501 (39700)	13.76	12.94	11.80
	25RB-Low (0)	2685 (41540)	13.39	12.47	11.29
		2639(41080)	13.20	12.39	11.38
		2593 (40620)	13.47	12.45	11.69
		2547(40160)	13.74	12.55	11.57
		2501 (39700)	13.76	12.85	11.90
	50RB (0)	2685 (41540)	13.46	12.67	11.60
		2639(41080)	13.23	12.17	11.57
		2593 (40620)	13.59	12.51	11.55
2547(40160)		13.38	12.69	11.37	
2501 (39700)		13.63	12.82	11.83	
15MHz	1RB-High (74)	2682.5 (41515)	14.35	13.50	12.41
		2637.8(41068)	14.20	13.26	12.57
		2593 (40620)	14.53	13.51	12.50
		2548.3(40173)	14.41	13.40	12.44
		2503.5 (39725)	14.57	13.80	12.37
	1RB-Middle (37)	2682.5 (41515)	14.74	13.80	12.42
		2637.8(41068)	14.42	13.29	12.26
		2593 (40620)	14.78	14.09	12.49

		2548.3(40173)	14.64	13.75	12.51
		2503.5 (39725)	14.96	14.23	12.83
	1RB-Low (0)	2682.5 (41515)	14.44	13.58	12.62
		2637.8(41068)	14.32	13.39	12.07
		2593 (40620)	14.81	13.42	12.64
		2548.3(40173)	14.76	13.65	12.66
		2503.5 (39725)	14.92	14.12	12.77
	36RB-High (38)	2682.5 (41515)	13.51	12.55	11.28
		2637.8(41068)	13.27	12.11	11.10
		2593 (40620)	13.59	12.53	11.49
		2548.3(40173)	13.62	12.75	11.44
		2503.5 (39725)	13.69	12.87	11.29
	36RB-Middle (19)	2682.5 (41515)	13.56	12.43	11.41
		2637.8(41068)	13.30	12.50	11.44
		2593 (40620)	13.67	12.79	11.55
		2548.3(40173)	13.13	12.78	11.33
		2503.5 (39725)	13.84	12.68	11.84
	36RB-Low (0)	2682.5 (41515)	13.75	12.77	11.17
		2637.8(41068)	13.25	12.21	11.28
		2593 (40620)	13.60	12.54	11.71
		2548.3(40173)	13.74	12.43	11.85
		2503.5 (39725)	13.90	13.02	11.60
	75RB (0)	2682.5 (41515)	13.50	12.52	11.39
		2637.8(41068)	13.33	12.17	11.75
		2593 (40620)	13.77	12.46	11.48
2548.3(40173)		13.47	12.51	11.66	
2503.5 (39725)		13.63	12.86	11.77	
20MHz	1RB-High (99)	2680 (41490)	14.40	13.67	12.36
		2636.5(41055)	14.13	13.39	12.06
		2593 (40620)	14.47	13.68	12.32
		2549.5(40185)	14.48	13.27	12.38
		2506 (39750)	14.77	14.00	12.24
	1RB-Middle (50)	2680 (41490)	14.57	13.78	12.48
		2636.5(41055)	14.42	13.09	12.20
		2593 (40620)	14.69	13.90	12.57
		2549.5(40185)	14.62	13.86	12.51
		2506 (39750)	14.89	14.12	12.79
	1RB-Low (0)	2680 (41490)	14.49	13.73	12.54
		2636.5(41055)	14.34	13.55	12.24
		2593 (40620)	14.61	13.54	12.54
		2549.5(40185)	14.57	13.82	12.46
		2506 (39750)	14.75	13.97	12.66

	50RB-High (50)	2680 (41490)	13.47	12.49	11.43
		2636.5(41055)	13.26	12.22	11.20
		2593 (40620)	13.50	12.35	11.49
		2549.5(40185)	13.54	12.55	11.48
		2506 (39750)	13.80	12.84	11.30
	50RB-Middle (25)	2680 (41490)	13.52	12.56	11.52
		2636.5(41055)	13.31	12.32	11.26
		2593 (40620)	13.60	12.61	11.52
		2549.5(40185)	13.13	12.60	11.53
		2506 (39750)	13.82	12.82	11.79
	50RB-Low (0)	2680 (41490)	13.55	12.60	11.09
		2636.5(41055)	13.29	12.30	11.24
		2593 (40620)	13.62	12.65	11.57
		2549.5(40185)	13.55	12.60	11.05
		2506 (39750)	13.77	12.85	11.74
	100RB (0)	2680 (41490)	13.52	12.56	11.49
		2636.5(41055)	13.20	12.25	11.58
		2593 (40620)	13.57	12.61	11.52
		2549.5(40185)	13.48	12.54	11.48
		2506 (39750)	13.47	12.80	11.75

LTE B41 PC2 (Power Level C1)

LTE B41 PC2					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	11.46	10.95	9.60
		2640.3(41093)	12.04	10.64	9.56
		2593 (40620)	11.82	10.97	9.60
		2545.8(40148)	11.80	11.05	9.62
		2498.5 (39675)	12.20	11.34	10.15
	1RB-Middle (12)	2687.5 (41565)	11.69	11.09	9.63
		2640.3(41093)	12.14	10.98	9.65
		2593 (40620)	11.97	11.19	9.88
		2545.8(40148)	11.84	11.02	9.92
		2498.5 (39675)	12.14	11.36	10.13
	1RB-Low (0)	2687.5 (41565)	11.61	10.94	9.66
		2640.3(41093)	11.81	11.05	9.73
		2593 (40620)	11.82	11.13	9.74
		2545.8(40148)	11.76	11.00	9.80
		2498.5 (39675)	12.04	11.19	9.88
	12RB-High (13)	2687.5 (41565)	10.65	9.77	8.72
		2640.3(41093)	10.56	9.70	8.61

		2593 (40620)	10.92	9.88	8.95	
		2545.8(40148)	10.92	9.81	8.81	
		2498.5 (39675)	11.05	10.31	9.36	
	12RB-Middle (6)	2687.5 (41565)	10.70	9.68	8.63	
		2640.3(41093)	11.02	9.71	8.69	
		2593 (40620)	10.80	9.85	9.00	
		2545.8(40148)	10.96	9.80	8.93	
		2498.5 (39675)	11.07	10.23	9.35	
	12RB-Low (0)	2687.5 (41565)	10.74	9.69	8.80	
		2640.3(41093)	10.75	9.87	8.87	
		2593 (40620)	10.98	9.89	9.04	
		2545.8(40148)	10.96	9.96	8.89	
		2498.5 (39675)	11.18	10.19	9.13	
	25RB (0)	2687.5 (41565)	10.72	9.86	8.59	
		2640.3(41093)	10.61	9.60	8.75	
		2593 (40620)	10.85	10.02	8.89	
		2545.8(40148)	10.89	9.96	9.03	
		2498.5 (39675)	11.21	10.06	9.12	
	10MHz	1RB-High (49)	2685 (41540)	11.69	10.79	9.61
			2639(41080)	11.87	10.71	9.54
2593 (40620)			11.69	11.10	9.65	
2547(40160)			11.73	11.05	9.62	
2501 (39700)			12.18	11.26	9.98	
1RB-Middle (24)		2685 (41540)	11.68	10.92	9.62	
		2639(41080)	12.17	10.84	9.60	
		2593 (40620)	11.92	11.31	9.94	
		2547(40160)	11.80	11.01	9.81	
		2501 (39700)	12.02	11.39	10.01	
1RB-Low (0)		2685 (41540)	11.55	10.83	9.54	
		2639(41080)	12.03	10.97	9.61	
		2593 (40620)	11.91	11.11	9.83	
		2547(40160)	11.88	11.05	9.72	
		2501 (39700)	11.95	11.17	9.88	
25RB-High (25)		2685 (41540)	10.63	9.62	8.71	
		2639(41080)	10.52	9.55	8.72	
		2593 (40620)	10.87	10.00	9.04	
		2547(40160)	10.90	9.89	8.89	
		2501 (39700)	11.02	10.15	9.21	
25RB-Middle (12)		2685 (41540)	10.65	9.81	8.77	
		2639(41080)	11.09	9.71	8.78	
		2593 (40620)	10.77	9.95	9.00	
		2547(40160)	10.82	9.81	8.91	

15MHz	25RB-Low (0)	2501 (39700)	11.00	10.33	9.17
		2685 (41540)	10.81	9.86	8.93
		2639(41080)	10.73	9.68	8.87
		2593 (40620)	10.86	9.91	8.97
		2547(40160)	10.82	10.01	8.89
	50RB (0)	2501 (39700)	11.03	10.10	9.07
		2685 (41540)	10.81	9.72	8.71
		2639(41080)	10.69	9.59	8.77
		2593 (40620)	10.98	9.81	9.07
		2547(40160)	10.80	9.89	9.02
	1RB-High (74)	2501 (39700)	11.14	10.04	9.29
		2682.5 (41515)	11.70	10.85	9.61
		2637.8(41068)	12.00	10.82	9.54
		2593 (40620)	11.76	11.13	9.73
		2548.3(40173)	11.78	10.94	9.61
	1RB-Middle (37)	2503.5 (39725)	12.11	11.32	10.01
		2682.5 (41515)	11.67	10.95	9.67
		2637.8(41068)	12.18	11.02	9.55
		2593 (40620)	11.87	11.11	9.98
		2548.3(40173)	12.03	11.12	9.70
1RB-Low (0)	2503.5 (39725)	12.10	11.46	10.01	
	2682.5 (41515)	11.76	10.90	9.74	
	2637.8(41068)	11.83	11.04	9.74	
	2593 (40620)	11.90	11.15	9.83	
	2548.3(40173)	11.81	11.17	9.89	
36RB-High (38)	2503.5 (39725)	12.07	11.32	10.01	
	2682.5 (41515)	10.68	9.61	8.63	
	2637.8(41068)	10.68	9.73	8.83	
	2593 (40620)	10.91	10.02	9.10	
	2548.3(40173)	10.88	9.87	8.77	
36RB-Middle (19)	2503.5 (39725)	11.01	10.20	9.17	
	2682.5 (41515)	10.69	9.82	8.62	
	2637.8(41068)	11.10	9.71	8.81	
	2593 (40620)	10.85	9.99	9.05	
	2548.3(40173)	10.95	9.93	8.89	
36RB-Low (0)	2503.5 (39725)	11.18	10.14	9.35	
	2682.5 (41515)	10.84	9.77	8.88	
	2637.8(41068)	10.65	9.66	8.88	
	2593 (40620)	10.99	9.88	9.03	
	2548.3(40173)	10.76	10.03	9.08	
75RB (0)	2503.5 (39725)	10.95	10.01	9.17	
		2682.5 (41515)	10.71	9.66	8.83

		2637.8(41068)	10.60	9.82	8.86
		2593 (40620)	10.78	10.01	8.89
		2548.3(40173)	10.92	9.76	8.93
		2503.5 (39725)	11.27	10.07	9.28
20MHz	1RB-High (99)	2680 (41490)	11.60	10.89	9.61
		2636.5(41055)	11.98	10.76	9.47
		2593 (40620)	11.80	11.03	9.70
		2549.5(40185)	11.75	10.98	9.69
		2506 (39750)	12.13	11.36	10.05
	1RB-Middle (50)	2680 (41490)	11.78	10.99	9.71
		2636.5(41055)	12.16	10.93	9.64
		2593 (40620)	11.99	11.22	9.92
		2549.5(40185)	11.94	11.16	9.85
		2506 (39750)	12.14	11.44	10.14
	1RB-Low (0)	2680 (41490)	11.69	10.95	9.64
		2636.5(41055)	11.93	11.00	9.70
		2593 (40620)	11.90	11.14	9.84
		2549.5(40185)	11.86	11.11	9.81
		2506 (39750)	12.07	11.28	9.97
	50RB-High (50)	2680 (41490)	10.66	9.71	8.71
		2636.5(41055)	10.64	9.68	8.74
		2593 (40620)	10.90	9.96	9.00
		2549.5(40185)	10.82	9.86	8.89
		2506 (39750)	11.08	10.23	9.27
	50RB-Middle (25)	2680 (41490)	10.74	9.80	8.75
		2636.5(41055)	11.13	9.74	8.81
		2593 (40620)	10.92	9.95	8.98
		2549.5(40185)	10.88	9.93	8.95
		2506 (39750)	11.09	10.24	9.30
	50RB-Low (0)	2680 (41490)	10.74	9.81	8.84
		2636.5(41055)	10.70	9.77	8.81
		2593 (40620)	10.94	9.95	9.01
		2549.5(40185)	10.90	9.93	9.02
		2506 (39750)	11.10	10.13	9.18
	100RB (0)	2680 (41490)	10.72	9.78	8.74
		2636.5(41055)	10.66	9.73	8.77
		2593 (40620)	10.93	9.93	9.01
		2549.5(40185)	10.87	9.88	8.98
		2506 (39750)	11.18	10.16	9.24

LTE B66 ANT1 (Power Level A1)

LTE B66 ANT1						
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	
1.4MHz	1RB-High (5)	1779.3 (132665)	24.55	23.68	22.58	
		1745 (132322)	24.63	23.80	22.80	
		1710.7 (131979)	24.63	23.84	22.72	
	1RB-Middle (3)	1779.3 (132665)	24.60	23.84	22.68	
		1745 (132322)	24.66	23.87	22.72	
		1710.7 (131979)	24.68	23.83	22.76	
	1RB-Low (0)	1779.3 (132665)	24.56	23.80	22.68	
		1745 (132322)	24.66	23.88	22.71	
		1710.7 (131979)	24.66	23.75	22.67	
	3RB-High (3)	1779.3 (132665)	24.62	23.64	22.62	
		1745 (132322)	24.65	23.70	22.64	
		1710.7 (131979)	24.69	23.67	22.71	
	3RB-Middle (1)	1779.3 (132665)	24.59	23.64	22.66	
		1745 (132322)	24.71	23.71	22.73	
		1710.7 (131979)	24.68	23.74	22.74	
	3RB-Low (0)	1779.3 (132665)	24.64	23.63	22.63	
		1745 (132322)	24.71	23.69	22.69	
		1710.7 (131979)	24.71	23.75	22.72	
	6RB (0)	1779.3 (132665)	23.57	22.63	21.49	
		1745 (132322)	23.69	22.75	21.55	
		1710.7 (131979)	23.66	22.72	21.60	
	3MHz	1RB-High (14)	1778.5 (132657)	24.58	23.66	22.69
			1745 (132322)	24.68	23.82	22.75
			1711.5 (131987)	24.60	23.74	22.71
		1RB-Middle (7)	1778.5 (132657)	24.61	23.69	22.66
			1745 (132322)	24.74	23.86	22.83
			1711.5 (131987)	24.73	23.77	22.79
1RB-Low (0)		1778.5 (132657)	24.56	23.76	22.68	
		1745 (132322)	24.67	23.84	22.78	
		1711.5 (131987)	24.64	23.88	22.76	
8RB-High (7)		1778.5 (132657)	23.53	22.62	21.56	
		1745 (132322)	23.60	22.66	21.58	
		1711.5 (131987)	23.59	22.64	21.57	
8RB-Middle (4)		1778.5 (132657)	23.57	22.60	21.58	
		1745 (132322)	23.63	22.68	21.61	
		1711.5 (131987)	23.63	22.65	21.65	
8RB-Low (0)		1778.5 (132657)	23.57	22.61	21.57	
		1745 (132322)	23.66	22.74	21.63	

		1711.5 (131987)	23.63	22.70	21.64	
	15RB (0)	1778.5 (132657)	23.54	22.59	21.50	
		1745 (132322)	23.58	22.62	21.61	
		1711.5 (131987)	23.62	22.58	21.56	
5MHz	1RB-High (24)	1777.5 (132647)	24.63	23.72	22.69	
		1745 (132322)	24.70	23.91	22.75	
		1712.5 (131997)	24.64	23.83	22.75	
	1RB-Middle (12)	1777.5 (132647)	24.64	23.79	22.72	
		1745 (132322)	24.73	23.91	22.86	
		1712.5 (131997)	24.71	23.87	22.76	
	1RB-Low (0)	1777.5 (132647)	24.63	23.68	22.71	
		1745 (132322)	24.72	23.85	22.88	
		1712.5 (131997)	24.70	23.80	22.77	
	12RB-High (13)	1777.5 (132647)	23.59	22.54	21.55	
		1745 (132322)	23.63	22.56	21.62	
		1712.5 (131997)	23.62	22.61	21.58	
	12RB-Middle (6)	1777.5 (132647)	23.57	22.56	21.57	
		1745 (132322)	23.66	22.61	21.62	
		1712.5 (131997)	23.66	22.58	21.59	
	12RB-Low (0)	1777.5 (132647)	23.59	22.58	21.61	
		1745 (132322)	23.73	22.62	21.70	
		1712.5 (131997)	23.63	22.60	21.61	
	25RB (0)	1777.5 (132647)	23.59	22.59	21.56	
		1745 (132322)	23.61	22.62	21.57	
		1712.5 (131997)	23.61	22.64	21.58	
	10MHz	1RB-High (49)	1775 (132622)	24.62	23.67	22.59
			1745 (132322)	24.68	23.74	22.80
			1715 (132022)	24.68	23.84	22.66
1RB-Middle (24)		1775 (132622)	24.65	23.77	22.68	
		1745 (132322)	24.74	23.82	22.74	
		1715 (132022)	24.67	23.79	22.80	
1RB-Low (0)		1775 (132622)	24.63	23.81	22.69	
		1745 (132322)	24.74	23.91	22.75	
		1715 (132022)	24.69	23.88	22.78	
25RB-High (25)		1775 (132622)	23.50	22.54	21.56	
		1745 (132322)	23.72	22.70	21.69	
		1715 (132022)	23.70	22.67	21.65	
25RB-Middle (12)		1775 (132622)	23.56	22.58	21.54	
		1745 (132322)	23.65	22.65	21.67	
		1715 (132022)	23.61	22.59	21.56	
25RB-Low (0)		1775 (132622)	23.65	22.67	21.55	
		1745 (132322)	23.66	22.66	21.62	

		1715 (132022)	23.54	22.49	21.47
	50RB (0)	1775 (132622)	23.61	22.56	21.57
		1745 (132322)	23.69	22.70	21.65
		1715 (132022)	23.61	22.61	21.56
15MHz	1RB-High (74)	1772.5 (132597)	24.53	23.62	22.53
		1745 (132322)	24.57	23.78	22.58
		1717.5 (132047)	24.59	23.79	22.61
	1RB-Middle (37)	1772.5 (132597)	24.61	23.78	22.62
		1745 (132322)	24.69	23.78	22.75
		1717.5 (132047)	24.66	23.77	22.69
	1RB-Low (0)	1772.5 (132597)	24.53	23.66	22.62
		1745 (132322)	24.70	23.88	22.80
		1717.5 (132047)	24.64	23.81	22.68
	36RB-High (38)	1772.5 (132597)	23.54	22.57	21.48
		1745 (132322)	23.57	22.62	21.54
		1717.5 (132047)	23.56	22.54	21.57
	36RB-Middle (19)	1772.5 (132597)	23.52	22.54	21.56
		1745 (132322)	23.67	22.66	21.60
		1717.5 (132047)	23.61	22.59	21.58
	36RB-Low (0)	1772.5 (132597)	23.54	22.57	21.49
		1745 (132322)	23.67	22.62	21.59
		1717.5 (132047)	23.52	22.48	21.44
	75RB (0)	1772.5 (132597)	23.61	22.52	21.51
		1745 (132322)	23.65	22.56	21.54
		1717.5 (132047)	23.55	22.55	21.48
20MHz	1RB-High (99)	1770 (132572)	24.59	23.65	22.59
		1745 (132322)	24.59	23.82	22.65
		1720 (132072)	24.60	23.77	22.68
	1RB-Middle (50)	1770 (132572)	24.68	23.81	22.68
		1745 (132322)	24.77	23.88	22.79
		1720 (132072)	24.70	23.81	22.76
	1RB-Low (0)	1770 (132572)	24.57	23.69	22.56
		1745 (132322)	24.70	23.85	22.72
		1720 (132072)	24.63	23.78	22.67
	50RB-High (50)	1770 (132572)	23.54	22.59	21.54
		1745 (132322)	23.73	22.67	21.64
		1720 (132072)	23.55	22.59	21.55
	50RB-Middle (25)	1770 (132572)	23.70	22.62	21.58
		1745 (132322)	23.72	22.69	21.62
		1720 (132072)	23.70	22.63	21.57
50RB-Low (0)	1770 (132572)	23.60	22.61	21.62	
	1745 (132322)	23.71	22.71	21.64	

		1720 (132072)	23.50	22.54	21.47
	100RB (0)	1770 (132572)	23.60	22.64	21.58
		1745 (132322)	23.71	22.69	21.63
		1720 (132072)	23.60	22.55	21.47

LTE B66 ANT1 (Power Level B1)

LTE B66 ANT1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	14.65	13.85	12.80
		1745 (132322)	14.91	13.92	12.89
		1710.7 (131979)	14.64	13.91	12.88
	1RB-Middle (3)	1779.3 (132665)	14.87	14.00	12.78
		1745 (132322)	14.80	14.03	12.90
		1710.7 (131979)	15.02	14.20	13.00
	1RB-Low (0)	1779.3 (132665)	14.68	14.04	12.73
		1745 (132322)	14.70	13.94	12.77
		1710.7 (131979)	14.85	14.02	12.83
	3RB-High (3)	1779.3 (132665)	14.67	13.80	12.74
		1745 (132322)	14.83	14.05	12.79
		1710.7 (131979)	14.75	13.93	13.01
	3RB-Middle (1)	1779.3 (132665)	14.79	13.94	12.84
		1745 (132322)	14.78	14.04	13.05
		1710.7 (131979)	15.00	13.99	13.04
	3RB-Low (0)	1779.3 (132665)	14.83	13.96	12.83
		1745 (132322)	14.68	14.11	12.78
		1710.7 (131979)	14.67	14.22	12.82
	6RB (0)	1779.3 (132665)	13.83	12.85	11.75
		1745 (132322)	13.76	13.01	11.93
		1710.7 (131979)	13.78	12.84	11.69
3MHz	1RB-High (14)	1778.5 (132657)	14.61	13.82	12.77
		1745 (132322)	14.86	13.90	12.75
		1711.5 (131987)	14.60	14.01	13.04
	1RB-Middle (7)	1778.5 (132657)	14.70	13.96	12.71
		1745 (132322)	14.82	14.12	12.98
		1711.5 (131987)	15.03	14.20	13.08
	1RB-Low (0)	1778.5 (132657)	14.77	13.89	12.77
		1745 (132322)	14.84	14.06	12.80
		1711.5 (131987)	14.63	14.08	12.79
8RB-High (7)	1778.5 (132657)	13.64	12.81	11.72	
	1745 (132322)	13.82	12.90	11.74	
	1711.5 (131987)	13.88	12.92	11.79	

	8RB-Middle (4)	1778.5 (132657)	13.80	12.72	12.00	
		1745 (132322)	13.77	12.79	11.81	
		1711.5 (131987)	13.81	12.97	11.88	
	8RB-Low (0)	1778.5 (132657)	14.05	12.76	11.82	
		1745 (132322)	13.82	12.83	11.70	
		1711.5 (131987)	13.85	12.67	11.75	
	15RB (0)	1778.5 (132657)	13.82	12.87	11.68	
		1745 (132322)	13.90	12.97	11.72	
		1711.5 (131987)	13.88	12.67	11.63	
5MHz	1RB-High (24)	1777.5 (132647)	14.52	13.94	12.76	
		1745 (132322)	14.71	13.86	12.89	
		1712.5 (131997)	14.62	13.91	13.00	
	1RB-Middle (12)	1777.5 (132647)	14.79	14.15	13.00	
		1745 (132322)	14.92	13.96	12.99	
		1712.5 (131997)	14.98	14.17	12.96	
	1RB-Low (0)	1777.5 (132647)	14.80	14.13	12.95	
		1745 (132322)	14.81	14.22	12.78	
		1712.5 (131997)	14.80	14.23	12.76	
	12RB-High (13)	1777.5 (132647)	13.70	12.84	11.77	
		1745 (132322)	13.94	12.78	11.76	
		1712.5 (131997)	14.01	12.76	11.75	
	12RB-Middle (6)	1777.5 (132647)	14.00	12.70	11.89	
		1745 (132322)	13.91	12.87	11.93	
		1712.5 (131997)	14.02	13.09	11.81	
	12RB-Low (0)	1777.5 (132647)	13.80	13.00	11.73	
		1745 (132322)	13.98	12.91	11.80	
		1712.5 (131997)	13.79	12.81	11.74	
	25RB (0)	1777.5 (132647)	13.78	12.96	11.86	
		1745 (132322)	13.91	12.74	11.69	
		1712.5 (131997)	13.94	12.95	11.69	
	10MHz	1RB-High (49)	1775 (132622)	14.81	13.84	12.93
			1745 (132322)	14.71	13.88	12.86
			1715 (132022)	14.87	13.93	12.88
1RB-Middle (24)		1775 (132622)	14.68	13.87	12.90	
		1745 (132322)	14.82	14.08	13.05	
		1715 (132022)	15.00	14.17	13.18	
1RB-Low (0)		1775 (132622)	14.89	14.02	12.91	
		1745 (132322)	14.70	14.06	12.88	
		1715 (132022)	14.69	14.13	12.91	
25RB-High (25)		1775 (132622)	13.72	12.86	11.83	
		1745 (132322)	13.98	12.99	11.63	
		1715 (132022)	13.91	12.87	11.70	

	25RB-Middle (12)	1775 (132622)	13.83	12.98	11.81	
		1745 (132322)	14.04	13.04	11.73	
		1715 (132022)	13.97	12.79	11.71	
	25RB-Low (0)	1775 (132622)	13.94	12.95	11.90	
		1745 (132322)	14.06	12.78	11.69	
		1715 (132022)	13.86	12.79	11.80	
	50RB (0)	1775 (132622)	13.81	12.72	11.94	
		1745 (132322)	13.71	12.89	11.77	
		1715 (132022)	13.88	12.84	11.85	
15MHz	1RB-High (74)	1772.5 (132597)	14.68	14.00	13.00	
		1745 (132322)	14.92	14.14	12.83	
		1717.5 (132047)	14.86	13.82	12.96	
	1RB-Middle (37)	1772.5 (132597)	14.81	14.06	12.83	
		1745 (132322)	14.74	14.16	12.93	
		1717.5 (132047)	15.04	13.96	13.11	
	1RB-Low (0)	1772.5 (132597)	14.78	13.94	13.03	
		1745 (132322)	14.80	13.96	13.01	
		1717.5 (132047)	14.77	14.21	12.91	
	36RB-High (38)	1772.5 (132597)	13.69	12.71	11.89	
		1745 (132322)	13.91	12.87	11.89	
		1717.5 (132047)	14.01	12.79	11.97	
	36RB-Middle (19)	1772.5 (132597)	13.81	12.88	12.00	
		1745 (132322)	13.87	12.78	11.74	
		1717.5 (132047)	13.80	13.02	11.80	
	36RB-Low (0)	1772.5 (132597)	13.92	12.77	11.86	
		1745 (132322)	14.03	12.85	11.66	
		1717.5 (132047)	13.86	12.78	11.66	
	75RB (0)	1772.5 (132597)	13.94	12.70	11.77	
		1745 (132322)	13.84	12.86	11.82	
		1717.5 (132047)	13.91	12.69	11.83	
	20MHz	1RB-High (99)	1770 (132572)	14.72	13.95	12.93
			1745 (132322)	14.83	14.06	12.92
			1720 (132072)	14.80	14.01	12.95
1RB-Middle (50)		1770 (132572)	14.86	14.05	12.91	
		1745 (132322)	14.93	14.11	13.04	
		1720 (132072)	15.00	14.10	13.10	
1RB-Low (0)		1770 (132572)	14.80	14.07	12.93	
		1745 (132322)	14.84	14.13	12.97	
		1720 (132072)	14.82	14.13	12.88	
50RB-High (50)		1770 (132572)	13.82	12.86	11.81	
		1745 (132322)	13.93	12.89	11.83	
		1720 (132072)	13.96	12.85	11.90	

	50RB-Middle (25)	1770 (132572)	13.93	12.89	11.93
		1745 (132322)	13.96	12.95	11.92
		1720 (132072)	13.98	12.99	11.89
	50RB-Low (0)	1770 (132572)	13.97	12.94	11.91
		1745 (132322)	13.97	12.90	11.86
		1720 (132072)	13.87	12.76	11.79
	100RB (0)	1770 (132572)	13.93	12.87	11.85
		1745 (132322)	13.86	12.92	11.84
		1720 (132072)	13.89	12.85	11.80

LTE B66 ANT1 (Power Level C1)

LTE B66 ANT1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	12.64	11.95	10.83
		1745 (132322)	12.63	12.02	10.72
		1710.7 (131979)	12.76	11.81	10.97
	1RB-Middle (3)	1779.3 (132665)	12.70	11.83	10.91
		1745 (132322)	12.69	12.20	10.92
		1710.7 (131979)	12.76	12.17	11.03
	1RB-Low (0)	1779.3 (132665)	12.59	11.94	10.86
		1745 (132322)	12.81	12.04	10.84
		1710.7 (131979)	12.58	11.99	10.88
	3RB-High (3)	1779.3 (132665)	12.80	11.85	10.76
		1745 (132322)	12.52	11.87	10.70
		1710.7 (131979)	12.65	12.01	10.82
	3RB-Middle (1)	1779.3 (132665)	12.84	11.87	10.99
		1745 (132322)	12.84	12.13	10.84
		1710.7 (131979)	12.89	12.26	11.05
	3RB-Low (0)	1779.3 (132665)	12.71	11.96	10.94
		1745 (132322)	12.68	11.95	10.92
		1710.7 (131979)	12.56	12.05	10.80
6RB (0)	1779.3 (132665)	11.75	10.82	9.76	
	1745 (132322)	11.77	10.69	9.66	
	1710.7 (131979)	11.83	10.70	9.76	
3MHz	1RB-High (14)	1778.5 (132657)	12.68	11.87	10.68
		1745 (132322)	12.52	11.99	10.88
		1711.5 (131987)	12.72	11.93	10.75
	1RB-Middle (7)	1778.5 (132657)	12.61	11.99	10.97
		1745 (132322)	12.86	12.02	11.08
		1711.5 (131987)	12.96	12.26	10.97
1RB-Low (0)	1778.5 (132657)	12.77	12.00	10.92	

		1745 (132322)	12.66	11.99	10.83	
		1711.5 (131987)	12.78	12.03	10.88	
		1778.5 (132657)	11.81	10.86	9.62	
	8RB-High (7)	1745 (132322)	11.70	10.69	9.75	
		1711.5 (131987)	11.80	10.80	9.75	
		1778.5 (132657)	11.93	10.64	9.73	
	8RB-Middle (4)	1745 (132322)	11.77	10.75	9.91	
		1711.5 (131987)	11.79	10.91	9.91	
		1778.5 (132657)	11.96	10.71	9.89	
	8RB-Low (0)	1745 (132322)	11.83	10.82	9.80	
		1711.5 (131987)	11.80	10.61	9.60	
		1778.5 (132657)	11.71	10.78	9.72	
	15RB (0)	1745 (132322)	11.74	10.88	9.83	
		1711.5 (131987)	11.71	10.68	9.78	
		1777.5 (132647)	12.70	11.79	10.66	
5MHz	1RB-High (24)	1745 (132322)	12.65	11.90	10.79	
		1712.5 (131997)	12.66	11.94	10.87	
		1777.5 (132647)	12.60	11.93	10.86	
	1RB-Middle (12)	1745 (132322)	12.73	11.99	10.89	
		1712.5 (131997)	12.85	12.18	10.91	
		1777.5 (132647)	12.57	12.05	10.92	
	1RB-Low (0)	1745 (132322)	12.83	11.92	10.86	
		1712.5 (131997)	12.68	11.88	10.87	
		1777.5 (132647)	11.67	10.83	9.82	
	12RB-High (13)	1745 (132322)	11.69	10.90	9.85	
		1712.5 (131997)	11.81	10.78	9.82	
		1777.5 (132647)	11.88	10.64	9.66	
	12RB-Middle (6)	1745 (132322)	11.80	10.85	9.70	
		1712.5 (131997)	11.85	10.85	9.78	
		1777.5 (132647)	11.79	10.69	9.85	
	12RB-Low (0)	1745 (132322)	11.72	10.84	9.66	
		1712.5 (131997)	11.56	10.77	9.59	
		1777.5 (132647)	11.83	10.68	9.69	
	25RB (0)	1745 (132322)	11.64	10.67	9.69	
		1712.5 (131997)	11.69	10.79	9.75	
		1775 (132622)	12.65	11.91	10.80	
	10MHz	1RB-High (49)	1745 (132322)	12.55	11.98	10.80
			1715 (132022)	12.62	11.84	10.86
			1775 (132622)	12.65	11.91	10.92
		1RB-Middle (24)	1745 (132322)	12.88	12.18	10.96
			1715 (132022)	12.94	12.01	11.01
			1775 (132622)	12.69	11.96	10.86
		1RB-Low (0)	1775 (132622)	12.69	11.96	10.86

		1745 (132322)	12.84	12.01	10.89	
		1715 (132022)	12.58	11.95	10.80	
		1775 (132622)	11.66	10.65	9.84	
	25RB-High (25)	1745 (132322)	11.71	10.73	9.84	
		1715 (132022)	11.88	10.90	9.65	
		1775 (132622)	11.91	10.86	9.72	
	25RB-Middle (12)	1745 (132322)	11.98	10.80	9.76	
		1715 (132022)	11.82	10.88	9.67	
		1775 (132622)	11.95	10.76	9.70	
	25RB-Low (0)	1745 (132322)	11.84	10.82	9.76	
		1715 (132022)	11.72	10.63	9.52	
		1775 (132622)	11.79	10.58	9.79	
	50RB (0)	1745 (132322)	11.87	10.66	9.73	
		1715 (132022)	11.71	10.71	9.77	
		1772.5 (132597)	12.60	11.86	10.75	
15MHz	1RB-High (74)	1745 (132322)	12.58	11.91	10.87	
		1717.5 (132047)	12.66	12.02	10.95	
		1772.5 (132597)	12.68	11.81	10.88	
	1RB-Middle (37)	1745 (132322)	12.83	12.16	10.98	
		1717.5 (132047)	12.87	12.21	11.07	
		1772.5 (132597)	12.68	11.91	10.80	
	1RB-Low (0)	1745 (132322)	12.66	12.03	10.90	
		1717.5 (132047)	12.57	12.01	10.97	
		1772.5 (132597)	11.80	10.78	9.80	
	36RB-High (38)	1745 (132322)	11.69	10.70	9.69	
		1717.5 (132047)	11.78	10.69	9.79	
		1772.5 (132597)	11.87	10.83	9.89	
	36RB-Middle (19)	1745 (132322)	11.83	10.88	9.75	
		1717.5 (132047)	11.90	10.77	9.67	
		1772.5 (132597)	11.81	10.78	9.82	
	36RB-Low (0)	1745 (132322)	11.76	10.87	9.69	
		1717.5 (132047)	11.73	10.58	9.68	
		1772.5 (132597)	11.83	10.75	9.62	
	75RB (0)	1745 (132322)	11.81	10.88	9.75	
		1717.5 (132047)	11.80	10.73	9.62	
		1770 (132572)	12.72	11.92	10.78	
	20MHz	1RB-High (99)	1745 (132322)	12.67	11.99	10.84
			1720 (132072)	12.70	11.93	10.87
			1770 (132572)	12.75	11.93	10.89
		1RB-Middle (50)	1745 (132322)	12.84	12.13	10.99
			1720 (132072)	12.91	12.16	11.06
			1770 (132572)	12.69	11.99	10.85
1RB-Low (0)		1770 (132572)	12.69	11.99	10.85	

		1745 (132322)	12.74	12.04	10.91
		1720 (132072)	12.69	12.03	10.87
		1770 (132572)	11.77	10.77	9.75
	50RB-High (50)	1745 (132322)	11.84	10.81	9.78
		1720 (132072)	11.81	10.80	9.76
		1770 (132572)	11.84	10.76	9.79
	50RB-Middle (25)	1745 (132322)	11.92	10.85	9.85
		1720 (132072)	11.94	10.81	9.81
		1770 (132572)	11.86	10.81	9.84
	50RB-Low (0)	1745 (132322)	11.79	10.77	9.77
		1720 (132072)	11.70	10.73	9.66
		1770 (132572)	11.80	10.72	9.71
	100RB (0)	1745 (132322)	11.79	10.78	9.79
		1720 (132072)	11.79	10.69	9.69

LTE B66 ANT1 (Power Level D1/E1)

LTE B66 ANT1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	10.68	10.06	8.89
		1745 (132322)	10.76	10.14	9.02
		1710.7 (131979)	10.91	10.10	9.08
	1RB-Middle (3)	1779.3 (132665)	10.89	10.21	8.96
		1745 (132322)	10.94	10.19	9.05
		1710.7 (131979)	10.82	10.01	9.08
	1RB-Low (0)	1779.3 (132665)	10.77	10.11	8.92
		1745 (132322)	10.83	10.02	8.93
		1710.7 (131979)	10.76	9.97	8.99
	3RB-High (3)	1779.3 (132665)	10.77	10.14	8.89
		1745 (132322)	10.73	10.17	8.98
		1710.7 (131979)	10.78	10.01	9.13
	3RB-Middle (1)	1779.3 (132665)	10.73	10.01	9.15
		1745 (132322)	10.81	10.12	9.12
		1710.7 (131979)	11.02	10.14	9.18
	3RB-Low (0)	1779.3 (132665)	10.84	9.95	9.08
		1745 (132322)	10.91	10.03	8.95
		1710.7 (131979)	10.67	9.86	9.08
	6RB (0)	1779.3 (132665)	9.73	8.96	7.91
		1745 (132322)	9.78	8.93	8.00
		1710.7 (131979)	9.87	8.86	7.77
3MHz	1RB-High (14)	1778.5 (132657)	10.65	10.17	8.98
		1745 (132322)	10.68	10.10	8.88

		1711.5 (131987)	10.83	10.05	9.00
	1RB-Middle (7)	1778.5 (132657)	10.83	10.02	9.03
		1745 (132322)	10.82	10.03	9.00
		1711.5 (131987)	10.89	9.98	9.03
	1RB-Low (0)	1778.5 (132657)	10.82	10.14	9.05
		1745 (132322)	10.85	10.07	9.04
		1711.5 (131987)	10.70	9.92	8.91
	8RB-High (7)	1778.5 (132657)	9.78	8.86	7.80
		1745 (132322)	9.90	9.01	8.04
		1711.5 (131987)	9.84	8.83	7.84
	8RB-Middle (4)	1778.5 (132657)	9.76	8.97	7.88
		1745 (132322)	9.88	8.93	7.87
		1711.5 (131987)	9.78	8.94	7.96
	8RB-Low (0)	1778.5 (132657)	9.81	9.09	7.89
		1745 (132322)	9.94	8.96	7.95
		1711.5 (131987)	9.63	8.70	7.84
	15RB (0)	1778.5 (132657)	9.78	8.80	7.76
		1745 (132322)	9.81	8.96	8.00
		1711.5 (131987)	9.84	8.74	7.92
5MHz	1RB-High (24)	1777.5 (132647)	10.65	10.04	8.98
		1745 (132322)	10.69	10.13	9.02
		1712.5 (131997)	10.76	9.97	9.12
	1RB-Middle (12)	1777.5 (132647)	10.83	10.11	9.13
		1745 (132322)	10.93	10.16	9.10
		1712.5 (131997)	10.93	10.06	9.17
	1RB-Low (0)	1777.5 (132647)	10.75	10.08	9.02
		1745 (132322)	10.75	9.98	9.05
		1712.5 (131997)	10.77	9.95	9.04
	12RB-High (13)	1777.5 (132647)	9.72	8.91	7.89
		1745 (132322)	9.88	9.03	7.87
		1712.5 (131997)	9.95	8.99	7.91
	12RB-Middle (6)	1777.5 (132647)	9.81	8.86	7.88
		1745 (132322)	9.81	9.07	7.95
		1712.5 (131997)	9.77	8.82	7.87
	12RB-Low (0)	1777.5 (132647)	9.88	8.96	8.00
		1745 (132322)	9.93	8.90	7.88
		1712.5 (131997)	9.65	8.82	7.81
25RB (0)	1777.5 (132647)	9.77	8.85	7.79	
	1745 (132322)	9.87	8.87	7.85	
	1712.5 (131997)	9.79	8.75	7.80	
10MHz	1RB-High (49)	1775 (132622)	10.78	10.17	8.97
		1745 (132322)	10.73	10.06	8.96

		1715 (132022)	10.85	10.08	8.97
	1RB-Middle (24)	1775 (132622)	10.73	10.10	9.07
		1745 (132322)	10.88	10.19	9.15
		1715 (132022)	10.95	10.15	9.12
	1RB-Low (0)	1775 (132622)	10.83	9.99	9.11
		1745 (132322)	10.86	9.97	9.07
		1715 (132022)	10.85	9.92	9.10
	25RB-High (25)	1775 (132622)	9.84	8.96	7.96
		1745 (132322)	9.92	8.94	8.05
		1715 (132022)	9.81	8.94	7.87
	25RB-Middle (12)	1775 (132622)	9.74	8.88	7.98
		1745 (132322)	9.90	9.00	7.88
		1715 (132022)	9.79	8.82	7.95
	25RB-Low (0)	1775 (132622)	9.95	8.96	7.99
		1745 (132322)	9.79	8.99	7.93
		1715 (132022)	9.77	8.85	7.84
	50RB (0)	1775 (132622)	9.83	8.98	7.76
		1745 (132322)	9.80	8.88	7.92
		1715 (132022)	9.68	8.71	7.78
15MHz	1RB-High (74)	1772.5 (132597)	10.66	10.08	8.96
		1745 (132322)	10.78	10.06	8.95
		1717.5 (132047)	10.77	9.97	9.07
	1RB-Middle (37)	1772.5 (132597)	10.76	10.15	9.11
		1745 (132322)	10.83	10.15	9.18
		1717.5 (132047)	10.82	10.18	9.12
	1RB-Low (0)	1772.5 (132597)	10.76	10.12	9.02
		1745 (132322)	10.76	10.04	9.00
		1717.5 (132047)	10.82	9.79	8.97
	36RB-High (38)	1772.5 (132597)	9.84	9.02	7.91
		1745 (132322)	9.88	8.87	8.06
		1717.5 (132047)	9.90	8.99	8.04
	36RB-Middle (19)	1772.5 (132597)	9.81	9.01	7.99
		1745 (132322)	9.90	8.91	7.92
		1717.5 (132047)	9.80	8.88	7.99
	36RB-Low (0)	1772.5 (132597)	9.75	9.02	8.07
		1745 (132322)	9.86	8.97	7.86
		1717.5 (132047)	9.70	8.80	7.72
75RB (0)	1772.5 (132597)	9.81	8.98	7.92	
	1745 (132322)	9.81	8.83	8.02	
	1717.5 (132047)	9.70	8.70	7.83	
20MHz	1RB-High (99)	1770 (132572)	10.80	10.13	9.02
		1745 (132322)	10.81	10.12	9.03

		1720 (132072)	10.91	10.09	9.08
1RB-Middle (50)		1770 (132572)	10.86	10.16	9.11
		1745 (132322)	10.94	10.16	9.15
		1720 (132072)	10.97	10.13	9.13
1RB-Low (0)		1770 (132572)	10.80	10.09	9.06
		1745 (132322)	10.90	10.09	9.07
		1720 (132072)	10.81	9.94	9.06
50RB-High (50)		1770 (132572)	9.81	8.98	7.95
		1745 (132322)	9.87	8.98	8.02
		1720 (132072)	9.95	8.94	7.99
50RB-Middle (25)		1770 (132572)	9.87	8.99	7.95
		1745 (132322)	9.94	9.06	7.99
		1720 (132072)	9.92	8.94	7.95
50RB-Low (0)		1770 (132572)	9.90	9.07	8.03
		1745 (132322)	9.92	9.01	8.01
		1720 (132072)	9.78	8.82	7.86
100RB (0)		1770 (132572)	9.84	8.94	7.91
		1745 (132322)	9.89	8.96	8.00
		1720 (132072)	9.83	8.85	7.88

LTE B71 (Power Level A1)

LTE B71					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	695.5 (133447)	24.47	23.65	22.52
		680.5 (133297)	24.43	23.67	22.50
		665.5 (133147)	24.43	23.54	22.50
	1RB-Middle (12)	695.5 (133447)	24.48	23.51	22.50
		680.5 (133297)	24.45	23.50	22.48
		665.5 (133147)	24.39	23.56	22.49
	1RB-Low (0)	695.5 (133447)	24.44	23.58	22.54
		680.5 (133297)	24.50	23.58	22.57
		665.5 (133147)	24.51	23.53	22.54
	12RB-High (13)	695.5 (133447)	23.42	22.42	21.36
		680.5 (133297)	23.41	22.36	21.33
		665.5 (133147)	23.37	22.30	21.30
	12RB-Middle (6)	695.5 (133447)	23.39	22.40	21.41
		680.5 (133297)	23.37	22.40	21.39
		665.5 (133147)	23.37	22.32	21.30
	12RB-Low (0)	695.5 (133447)	23.42	22.40	21.00
		680.5 (133297)	23.47	22.45	21.40
		665.5 (133147)	23.31	22.31	21.32

		25RB (0)	695.5 (133447)	23.44	22.45	21.40	
			680.5 (133297)	23.45	22.38	21.40	
			665.5 (133147)	23.38	22.36	21.30	
10MHz	1RB-High (49)		693 (133422)	24.44	23.62	22.49	
			680.5 (133297)	24.40	23.54	22.45	
			668 (133172)	24.43	23.71	22.50	
	1RB-Middle (24)		693 (133422)	24.48	23.58	22.54	
			680.5 (133297)	24.43	23.67	22.51	
			668 (133172)	24.50	23.70	22.52	
	1RB-Low (0)		693 (133422)	24.47	23.61	22.52	
			680.5 (133297)	24.45	23.55	22.49	
			668 (133172)	24.47	23.59	22.46	
	25RB-High (25)		693 (133422)	23.48	22.42	21.41	
			680.5 (133297)	23.39	22.35	21.34	
			668 (133172)	23.46	22.49	21.41	
	25RB-Middle (12)		693 (133422)	23.44	22.44	21.40	
			680.5 (133297)	23.42	22.39	21.39	
			668 (133172)	23.42	22.35	21.36	
	25RB-Low (0)		693 (133422)	23.52	22.49	21.47	
			680.5 (133297)	23.47	22.43	21.44	
			668 (133172)	23.39	22.40	21.34	
	50RB (0)		693 (133422)	23.53	22.22	21.46	
			680.5 (133297)	23.45	22.40	21.39	
			668 (133172)	23.43	22.44	21.42	
	15MHz	1RB-High (74)		690.5 (133397)	24.40	23.64	22.44
				680.5 (133297)	24.34	23.49	22.42
				670.5 (133197)	24.31	23.61	22.43
1RB-Middle (37)			690.5 (133397)	24.47	23.61	22.47	
			680.5 (133297)	24.48	23.66	22.54	
			670.5 (133197)	24.44	23.62	22.53	
1RB-Low (0)			690.5 (133397)	24.40	23.67	22.56	
			680.5 (133297)	24.42	23.55	22.57	
			670.5 (133197)	24.50	23.58	22.51	
36RB-High (38)			690.5 (133397)	23.39	22.31	21.32	
			680.5 (133297)	23.32	22.29	21.31	
			670.5 (133197)	23.41	22.42	21.40	
36RB-Middle (19)			690.5 (133397)	23.38	22.38	21.31	
			680.5 (133297)	23.42	22.35	21.34	
			670.5 (133197)	23.36	22.37	21.34	
36RB-Low (0)			690.5 (133397)	23.42	22.41	21.39	
			680.5 (133297)	23.37	22.36	21.36	
			670.5 (133197)	23.40	22.38	21.37	

20MHz	75RB (0)	690.5 (133397)	23.43	22.44	21.34
		680.5 (133297)	23.40	22.39	21.29
		670.5 (133197)	23.43	22.39	21.34
	1RB-High (99)	688 (133372)	24.23	23.36	22.30
		683 (133322)	24.25	23.30	22.34
		673 (133222)	24.19	23.43	22.22
	1RB-Middle (50)	688 (133372)	24.35	23.45	22.35
		683 (133322)	24.34	23.41	22.33
		673 (133222)	24.31	23.52	22.43
	1RB-Low (0)	688 (133372)	24.32	23.56	22.36
		683 (133322)	24.31	23.56	22.34
		673 (133222)	24.33	23.45	22.37
	50RB-High (50)	688 (133372)	23.20	22.16	21.13
		683 (133322)	23.15	22.15	21.16
		673 (133222)	23.30	22.29	21.26
	50RB-Middle (25)	688 (133372)	23.29	22.32	21.30
		683 (133322)	23.27	22.24	21.22
		673 (133222)	23.34	22.28	21.26
	50RB-Low (0)	688 (133372)	23.35	22.29	21.23
		683 (133322)	23.30	22.29	21.28
		673 (133222)	23.32	22.30	21.28
	100RB (0)	688 (133372)	23.31	22.29	21.20
		683 (133322)	23.24	22.20	21.19
		673 (133222)	23.26	22.25	21.24

LTE B71 (Power Level B1)

LTE B71					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	16QAM
5MHz	1RB-High (24)	695.5 (133447)	19.93	19.22	18.30
		680.5 (133297)	20.08	19.21	18.21
		665.5 (133147)	19.97	19.33	18.22
	1RB-Middle (12)	695.5 (133447)	20.08	19.45	18.34
		680.5 (133297)	20.31	19.64	18.29
		665.5 (133147)	20.14	19.45	18.27
	1RB-Low (0)	695.5 (133447)	20.23	19.40	18.20
		680.5 (133297)	20.24	19.35	18.22
		665.5 (133147)	20.16	19.66	18.56
	12RB-High (13)	695.5 (133447)	19.08	18.30	17.17
		680.5 (133297)	19.05	17.97	17.34
		665.5 (133147)	19.08	18.23	17.30
	12RB-Middle (6)	695.5 (133447)	19.08	18.27	17.26

		680.5 (133297)	19.19	18.25	17.37	
		665.5 (133147)	19.34	18.30	17.24	
		695.5 (133447)	19.12	18.17	17.26	
	12RB-Low (0)	680.5 (133297)	19.31	18.39	17.12	
		665.5 (133147)	19.20	18.13	17.10	
		695.5 (133447)	19.03	18.16	17.22	
	25RB (0)	680.5 (133297)	19.15	18.01	17.08	
		665.5 (133147)	19.07	18.29	17.27	
		693 (133422)	20.27	19.51	18.21	
10MHz	1RB-High (49)	680.5 (133297)	20.26	19.28	18.07	
		668 (133172)	20.10	19.30	18.27	
		693 (133422)	20.15	19.33	18.25	
	1RB-Middle (24)	680.5 (133297)	20.15	19.59	18.51	
		668 (133172)	20.36	19.46	18.25	
		693 (133422)	20.33	19.35	18.47	
	1RB-Low (0)	680.5 (133297)	20.25	19.30	18.46	
		668 (133172)	20.13	19.57	18.50	
		693 (133422)	19.10	18.31	17.12	
	25RB-High (25)	680.5 (133297)	19.29	18.22	17.34	
		668 (133172)	19.29	18.14	17.08	
		693 (133422)	19.26	18.18	17.16	
	25RB-Middle (12)	680.5 (133297)	19.25	18.16	17.32	
		668 (133172)	19.27	18.20	17.27	
		693 (133422)	19.21	18.24	17.21	
	25RB-Low (0)	680.5 (133297)	19.13	18.08	17.21	
		668 (133172)	19.34	18.33	17.20	
		693 (133422)	18.99	18.04	17.16	
	50RB (0)	680.5 (133297)	19.15	18.21	17.24	
		668 (133172)	19.21	18.10	17.28	
		690.5 (133397)	20.00	19.29	18.26	
	15MHz	1RB-High (74)	680.5 (133297)	20.17	19.29	18.13
			670.5 (133197)	19.97	19.38	18.37
			690.5 (133397)	20.37	19.44	18.35
		1RB-Middle (37)	680.5 (133297)	20.28	19.53	18.55
			670.5 (133197)	20.26	19.44	18.31
			690.5 (133397)	20.32	19.59	18.34
1RB-Low (0)		680.5 (133297)	20.27	19.41	18.34	
		670.5 (133197)	20.32	19.40	18.42	
		690.5 (133397)	19.15	18.20	16.93	
36RB-High (38)		680.5 (133297)	19.31	18.01	17.41	
		670.5 (133197)	19.12	18.37	17.05	
		690.5 (133397)	19.15	18.25	17.09	
36RB-Middle (19)		690.5 (133397)	19.15	18.25	17.09	

	36RB-Low (0)	680.5 (133297)	19.27	18.06	17.37
		670.5 (133197)	19.15	18.41	17.31
		690.5 (133397)	19.32	18.14	17.11
		680.5 (133297)	19.43	18.33	17.30
		670.5 (133197)	19.22	18.31	17.06
		690.5 (133397)	19.12	18.30	17.10
	75RB (0)	680.5 (133297)	19.00	18.11	17.12
		670.5 (133197)	19.04	18.27	17.29
		688 (133372)	20.09	19.38	18.33
	1RB-High (99)	683 (133322)	20.21	19.36	18.25
		673 (133222)	20.14	19.35	18.21
		688 (133372)	20.23	19.44	18.32
1RB-Middle (50)	683 (133322)	20.25	19.51	18.38	
	673 (133222)	20.28	19.53	18.38	
	688 (133372)	20.15	19.43	18.35	
1RB-Low (0)	683 (133322)	20.20	19.38	18.39	
	673 (133222)	20.26	19.52	18.39	
	688 (133372)	19.12	18.15	17.06	
50RB-High (50)	683 (133322)	19.13	18.10	17.26	
	673 (133222)	19.26	18.21	17.19	
	688 (133372)	19.22	18.21	17.18	
50RB-Middle (25)	683 (133322)	19.22	18.15	17.26	
	673 (133222)	19.30	18.23	17.25	
	688 (133372)	19.24	18.25	17.22	
50RB-Low (0)	683 (133322)	19.26	18.24	17.25	
	673 (133222)	19.33	18.24	17.24	
	688 (133372)	19.12	18.14	17.11	
100RB (0)	683 (133322)	19.16	18.17	17.16	
	673 (133222)	19.21	18.12	17.16	
	688 (133372)	19.12	18.15	17.06	

20MHz

LTE B71 (Power Level C1)

LTE B71					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	695.5 (133447)	18.24	17.45	16.03
		680.5 (133297)	18.09	17.29	16.26
		665.5 (133147)	18.08	17.29	16.20
	1RB-Middle (12)	695.5 (133447)	18.27	17.51	16.28
		680.5 (133297)	18.30	17.33	16.24
		665.5 (133147)	18.21	17.55	16.21
	1RB-Low (0)	695.5 (133447)	18.11	17.46	16.19
		680.5 (133297)	18.09	17.29	16.39

		665.5 (133147)	18.06	17.36	16.30
	12RB-High (13)	695.5 (133447)	17.12	15.97	14.96
		680.5 (133297)	17.08	16.03	14.99
		665.5 (133147)	17.27	16.27	15.18
	12RB-Middle (6)	695.5 (133447)	17.23	16.28	15.05
		680.5 (133297)	17.11	16.19	15.17
		665.5 (133147)	17.25	16.02	15.18
	12RB-Low (0)	695.5 (133447)	17.29	16.22	15.27
		680.5 (133297)	17.04	16.05	15.09
		665.5 (133147)	17.17	16.14	15.10
	25RB (0)	695.5 (133447)	17.19	16.01	15.03
		680.5 (133297)	17.20	16.14	14.99
		665.5 (133147)	17.19	16.12	15.10
10MHz	1RB-High (49)	693 (133422)	18.07	17.26	16.17
		680.5 (133297)	18.20	17.35	16.27
		668 (133172)	18.06	17.38	16.31
	1RB-Middle (24)	693 (133422)	18.27	17.36	16.19
		680.5 (133297)	18.26	17.26	16.28
		668 (133172)	18.24	17.65	16.29
	1RB-Low (0)	693 (133422)	18.11	17.28	16.18
		680.5 (133297)	18.15	17.39	16.22
		668 (133172)	18.23	17.57	16.26
	25RB-High (25)	693 (133422)	17.13	16.15	15.08
		680.5 (133297)	17.10	16.11	14.99
		668 (133172)	17.07	16.09	15.03
	25RB-Middle (12)	693 (133422)	17.10	16.32	15.22
		680.5 (133297)	17.30	16.18	15.09
		668 (133172)	17.18	16.03	15.03
	25RB-Low (0)	693 (133422)	17.11	16.33	15.13
		680.5 (133297)	17.09	16.22	15.05
		668 (133172)	17.13	16.14	15.19
	50RB (0)	693 (133422)	17.01	16.11	15.20
		680.5 (133297)	17.07	16.21	14.95
		668 (133172)	17.03	16.08	15.14
15MHz	1RB-High (74)	690.5 (133397)	18.07	17.37	16.09
		680.5 (133297)	18.11	17.29	16.31
		670.5 (133197)	18.15	17.14	16.20
	1RB-Middle (37)	690.5 (133397)	18.13	17.52	16.27
		680.5 (133297)	18.38	17.35	16.37
		670.5 (133197)	18.26	17.47	16.20
	1RB-Low (0)	690.5 (133397)	18.09	17.36	16.18
680.5 (133297)		18.17	17.52	16.17	

		670.5 (133197)	18.18	17.46	16.35
	36RB-High (38)	690.5 (133397)	17.00	16.20	15.17
		680.5 (133297)	17.04	16.03	15.06
		670.5 (133197)	17.29	16.15	15.13
	36RB-Middle (19)	690.5 (133397)	17.11	16.18	15.12
		680.5 (133297)	17.20	16.14	15.05
		670.5 (133197)	17.13	16.15	14.98
	36RB-Low (0)	690.5 (133397)	17.12	16.13	15.30
		680.5 (133297)	17.20	16.16	15.17
		670.5 (133197)	17.28	16.27	15.17
	75RB (0)	690.5 (133397)	17.11	16.05	15.01
		680.5 (133297)	17.25	16.19	15.04
		670.5 (133197)	17.11	16.11	15.21
20MHz	1RB-High (99)	688 (133372)	18.15	17.35	16.15
		683 (133322)	18.18	17.30	16.22
		673 (133222)	18.13	17.29	16.28
	1RB-Middle (50)	688 (133372)	18.25	17.46	16.25
		683 (133322)	18.36	17.36	16.29
		673 (133222)	18.24	17.55	16.32
	1RB-Low (0)	688 (133372)	18.17	17.43	16.24
		683 (133322)	18.17	17.43	16.29
		673 (133222)	18.15	17.48	16.29
	50RB-High (50)	688 (133372)	17.14	16.12	15.08
		683 (133322)	17.09	16.07	15.00
		673 (133222)	17.19	16.17	15.13
	50RB-Middle (25)	688 (133372)	17.19	16.22	15.14
		683 (133322)	17.25	16.13	15.15
		673 (133222)	17.24	16.16	15.12
	50RB-Low (0)	688 (133372)	17.24	16.24	15.22
		683 (133322)	17.19	16.20	15.16
		673 (133222)	17.20	16.18	15.15
	100RB (0)	688 (133372)	17.16	16.13	15.10
		683 (133322)	17.17	16.11	15.09
		673 (133222)	17.16	16.13	15.14

LTE B2 ANT3 (Power Level A1)

LTE B2 ANT3						
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	
1.4MHz	1RB-High (5)	1909.3 (19193)	23.40	22.73	21.80	
		1880 (18900)	23.54	22.58	21.64	
		1850.7 (18607)	23.41	22.48	21.71	
	1RB-Middle (3)	1909.3 (19193)	23.70	22.59	21.91	
		1880 (18900)	23.60	22.56	21.70	
		1850.7 (18607)	23.62	22.71	21.79	
	1RB-Low (0)	1909.3 (19193)	23.47	22.70	21.70	
		1880 (18900)	23.43	22.56	21.51	
		1850.7 (18607)	23.58	22.47	21.60	
	3RB-High (3)	1909.3 (19193)	23.50	22.61	21.64	
		1880 (18900)	23.61	22.61	21.63	
		1850.7 (18607)	23.51	22.50	21.53	
	3RB-Middle (1)	1909.3 (19193)	23.62	22.57	21.72	
		1880 (18900)	23.57	22.56	21.60	
		1850.7 (18607)	23.61	22.60	21.85	
	3RB-Low (0)	1909.3 (19193)	23.44	22.66	21.76	
		1880 (18900)	23.49	22.52	21.75	
		1850.7 (18607)	23.48	22.50	21.59	
	6RB (0)	1909.3 (19193)	22.44	21.77	20.57	
		1880 (18900)	22.54	21.63	20.57	
		1850.7 (18607)	22.49	21.75	20.75	
	3MHz	1RB-High (14)	1908.5 (19185)	23.54	22.61	21.81
			1880 (18900)	23.48	22.65	21.57
			1851.5 (18615)	23.47	22.68	21.71
		1RB-Middle (7)	1908.5 (19185)	23.60	22.77	21.73
			1880 (18900)	23.79	22.57	21.67
			1851.5 (18615)	23.49	22.74	21.83
1RB-Low (0)		1908.5 (19185)	23.60	22.75	21.69	
		1880 (18900)	23.59	22.71	21.60	
		1851.5 (18615)	23.52	22.69	21.52	
8RB-High (7)		1908.5 (19185)	22.55	21.74	20.72	
		1880 (18900)	22.41	21.55	20.57	
		1851.5 (18615)	22.69	21.56	20.59	
8RB-Middle (4)		1908.5 (19185)	22.68	21.64	20.73	
		1880 (18900)	22.67	21.80	20.63	
		1851.5 (18615)	22.55	21.61	20.64	
8RB-Low (0)		1908.5 (19185)	22.57	21.79	20.72	
		1880 (18900)	22.50	21.61	20.77	

		1851.5 (18615)	22.51	21.60	20.65	
	15RB (0)	1908.5 (19185)	22.61	21.62	20.65	
		1880 (18900)	22.58	21.53	20.77	
		1851.5 (18615)	22.36	21.66	20.69	
5MHz	1RB-High (24)	1907.5 (19175)	23.50	22.66	21.79	
		1880 (18900)	23.59	22.66	21.57	
		1852.5 (18625)	23.47	22.51	21.66	
	1RB-Middle (12)	1907.5 (19175)	23.66	22.64	21.89	
		1880 (18900)	23.77	22.66	21.62	
		1852.5 (18625)	23.54	22.52	21.63	
	1RB-Low (0)	1907.5 (19175)	23.59	22.70	21.67	
		1880 (18900)	23.54	22.71	21.67	
		1852.5 (18625)	23.48	22.67	21.49	
	12RB-High (13)	1907.5 (19175)	22.51	21.57	20.65	
		1880 (18900)	22.39	21.73	20.51	
		1852.5 (18625)	22.73	21.60	20.74	
	12RB-Middle (6)	1907.5 (19175)	22.49	21.70	20.80	
		1880 (18900)	22.66	21.71	20.58	
		1852.5 (18625)	22.73	21.68	20.57	
	12RB-Low (0)	1907.5 (19175)	22.56	21.83	20.65	
		1880 (18900)	22.37	21.68	20.68	
		1852.5 (18625)	22.43	21.75	20.74	
	25RB (0)	1907.5 (19175)	22.57	21.77	20.76	
		1880 (18900)	22.60	21.77	20.55	
		1852.5 (18625)	22.43	21.71	20.64	
	10MHz	1RB-High (49)	1905 (19150)	23.45	22.56	21.75
			1880 (18900)	23.61	22.46	21.69
			1855 (18650)	23.60	22.50	21.63
1RB-Middle (24)		1905 (19150)	23.57	22.61	21.73	
		1880 (18900)	23.56	22.64	21.64	
		1855 (18650)	23.56	22.63	21.79	
1RB-Low (0)		1905 (19150)	23.52	22.69	21.75	
		1880 (18900)	23.48	22.57	21.65	
		1855 (18650)	23.59	22.63	21.58	
25RB-High (25)		1905 (19150)	22.57	21.70	20.65	
		1880 (18900)	22.55	21.58	20.74	
		1855 (18650)	22.75	21.67	20.68	
25RB-Middle (12)		1905 (19150)	22.72	21.77	20.66	
		1880 (18900)	22.72	21.76	20.64	
		1855 (18650)	22.65	21.59	20.75	
25RB-Low (0)	1905 (19150)	22.53	21.69	20.77		
	1880 (18900)	22.45	21.81	20.68		

		1855 (18650)	22.51	21.69	20.78	
	50RB (0)	1905 (19150)	22.65	21.82	20.69	
		1880 (18900)	22.40	21.76	20.77	
		1855 (18650)	22.50	21.59	20.76	
15MHz	1RB-High (74)	1902.5 (19125)	23.40	22.72	21.75	
		1880 (18900)	23.45	22.62	21.56	
		1857.5 (18675)	23.51	22.62	21.66	
	1RB-Middle (37)	1902.5 (19125)	23.51	22.79	21.92	
		1880 (18900)	23.68	22.65	21.63	
		1857.5 (18675)	23.42	22.51	21.67	
	1RB-Low (0)	1902.5 (19125)	23.61	22.55	21.76	
		1880 (18900)	23.48	22.53	21.66	
		1857.5 (18675)	23.46	22.47	21.48	
	36RB-High (38)	1902.5 (19125)	22.46	21.80	20.57	
		1880 (18900)	22.54	21.61	20.60	
		1857.5 (18675)	22.73	21.72	20.70	
	36RB-Middle (19)	1902.5 (19125)	22.72	21.82	20.72	
		1880 (18900)	22.71	21.63	20.56	
		1857.5 (18675)	22.51	21.66	20.55	
	36RB-Low (0)	1902.5 (19125)	22.70	21.74	20.85	
		1880 (18900)	22.46	21.82	20.78	
		1857.5 (18675)	22.40	21.71	20.54	
	75RB (0)	1902.5 (19125)	22.48	21.79	20.77	
		1880 (18900)	22.59	21.64	20.71	
		1857.5 (18675)	22.58	21.63	20.71	
	20MHz	1RB-High (99)	1900 (19100)	23.51	22.68	21.71
			1880 (18900)	23.51	22.61	21.65
			1860 (18700)	23.55	22.58	21.62
1RB-Middle (50)		1900 (19100)	23.65	22.71	21.85	
		1880 (18900)	23.69	22.63	21.75	
		1860 (18700)	23.56	22.64	21.77	
1RB-Low (0)		1900 (19100)	23.52	22.66	21.68	
		1880 (18900)	23.52	22.61	21.66	
		1860 (18700)	23.54	22.62	21.61	
50RB-High (50)		1900 (19100)	22.52	21.71	20.66	
		1880 (18900)	22.53	21.67	20.65	
		1860 (18700)	22.66	21.71	20.72	
50RB-Middle (25)		1900 (19100)	22.62	21.78	20.79	
		1880 (18900)	22.68	21.71	20.66	
		1860 (18700)	22.66	21.72	20.66	
50RB-Low (0)		1900 (19100)	22.61	21.75	20.76	
		1880 (18900)	22.51	21.73	20.68	

		1860 (18700)	22.51	21.66	20.69
	100RB (0)	1900 (19100)	22.55	21.77	20.71
		1880 (18900)	22.51	21.68	20.69
		1860 (18700)	22.51	21.71	20.68

LTE B2 ANT3 (Power Level D1)

LTE B2 ANT3						
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	
1.4MHz	1RB-High (5)	1909.3 (19193)	12.47	12.47	12.50	
		1880 (18900)	12.54	12.44	12.44	
		1850.7 (18607)	12.60	12.40	12.74	
	1RB-Middle (3)	1909.3 (19193)	12.50	12.55	12.57	
		1880 (18900)	12.61	12.64	12.71	
		1850.7 (18607)	12.66	12.59	12.58	
	1RB-Low (0)	1909.3 (19193)	12.60	12.59	12.50	
		1880 (18900)	12.42	12.42	12.47	
		1850.7 (18607)	12.54	12.76	12.65	
	3RB-High (3)	1909.3 (19193)	12.44	12.53	12.55	
		1880 (18900)	12.37	12.61	12.58	
		1850.7 (18607)	12.48	12.40	12.54	
	3RB-Middle (1)	1909.3 (19193)	12.43	12.58	12.46	
		1880 (18900)	12.69	12.65	12.48	
		1850.7 (18607)	12.42	12.54	12.71	
	3RB-Low (0)	1909.3 (19193)	12.49	12.48	12.65	
		1880 (18900)	12.39	12.36	12.31	
		1850.7 (18607)	12.42	12.56	12.55	
	6RB (0)	1909.3 (19193)	12.63	12.33	12.69	
		1880 (18900)	12.39	12.66	12.42	
		1850.7 (18607)	12.55	12.64	12.59	
	3MHz	1RB-High (14)	1908.5 (19185)	12.54	12.66	12.52
			1880 (18900)	12.65	12.43	12.47
			1851.5 (18615)	12.53	12.61	12.58
1RB-Middle (7)		1908.5 (19185)	12.55	12.68	12.56	
		1880 (18900)	12.67	12.67	12.57	
		1851.5 (18615)	12.51	12.47	12.54	
1RB-Low (0)		1908.5 (19185)	12.44	12.43	12.51	
		1880 (18900)	12.63	12.48	12.48	
		1851.5 (18615)	12.56	12.58	12.62	
8RB-High (7)		1908.5 (19185)	12.49	12.51	12.49	
		1880 (18900)	12.60	12.58	12.57	
		1851.5 (18615)	12.62	12.54	12.62	

	8RB-Middle (4)	1908.5 (19185)	12.52	12.53	12.45	
		1880 (18900)	12.59	12.43	12.38	
		1851.5 (18615)	12.41	12.67	12.68	
	8RB-Low (0)	1908.5 (19185)	12.67	12.62	12.64	
		1880 (18900)	12.42	12.30	12.54	
		1851.5 (18615)	12.50	12.53	12.68	
	15RB (0)	1908.5 (19185)	12.52	12.36	12.60	
		1880 (18900)	12.51	12.60	12.39	
		1851.5 (18615)	12.44	12.47	12.43	
5MHz	1RB-High (24)	1907.5 (19175)	12.58	12.65	12.52	
		1880 (18900)	12.44	12.66	12.63	
		1852.5 (18625)	12.63	12.40	12.65	
	1RB-Middle (12)	1907.5 (19175)	12.64	12.63	12.57	
		1880 (18900)	12.72	12.69	12.60	
		1852.5 (18625)	12.54	12.54	12.53	
	1RB-Low (0)	1907.5 (19175)	12.67	12.45	12.53	
		1880 (18900)	12.44	12.46	12.45	
		1852.5 (18625)	12.53	12.60	12.50	
	12RB-High (13)	1907.5 (19175)	12.55	12.59	12.65	
		1880 (18900)	12.41	12.46	12.38	
		1852.5 (18625)	12.67	12.41	12.62	
	12RB-Middle (6)	1907.5 (19175)	12.47	12.67	12.46	
		1880 (18900)	12.70	12.55	12.47	
		1852.5 (18625)	12.62	12.69	12.72	
	12RB-Low (0)	1907.5 (19175)	12.52	12.54	12.69	
		1880 (18900)	12.40	12.49	12.33	
		1852.5 (18625)	12.47	12.46	12.44	
	25RB (0)	1907.5 (19175)	12.51	12.42	12.48	
		1880 (18900)	12.46	12.52	12.60	
		1852.5 (18625)	12.43	12.51	12.50	
	10MHz	1RB-High (49)	1905 (19150)	12.49	12.53	12.66
			1880 (18900)	12.44	12.53	12.55
			1855 (18650)	12.45	12.48	12.73
1RB-Middle (24)		1905 (19150)	12.49	12.49	12.55	
		1880 (18900)	12.79	12.51	12.69	
		1855 (18650)	12.67	12.58	12.54	
1RB-Low (0)		1905 (19150)	12.65	12.50	12.59	
		1880 (18900)	12.42	12.57	12.50	
		1855 (18650)	12.65	12.62	12.56	
25RB-High (25)		1905 (19150)	12.59	12.41	12.60	
		1880 (18900)	12.38	12.55	12.43	
		1855 (18650)	12.62	12.60	12.64	

	25RB-Middle (12)	1905 (19150)	12.46	12.64	12.41
		1880 (18900)	12.68	12.62	12.50
		1855 (18650)	12.47	12.61	12.76
	25RB-Low (0)	1905 (19150)	12.59	12.50	12.69
		1880 (18900)	12.60	12.34	12.44
		1855 (18650)	12.36	12.45	12.58
	50RB (0)	1905 (19150)	12.60	12.40	12.53
		1880 (18900)	12.48	12.63	12.40
		1855 (18650)	12.61	12.58	12.49
15MHz	1RB-High (74)	1902.5 (19125)	12.53	12.48	12.56
		1880 (18900)	12.60	12.54	12.59
		1857.5 (18675)	12.54	12.48	12.68
	1RB-Middle (37)	1902.5 (19125)	12.60	12.51	12.77
		1880 (18900)	12.65	12.59	12.57
		1857.5 (18675)	12.47	12.56	12.45
	1RB-Low (0)	1902.5 (19125)	12.64	12.53	12.46
		1880 (18900)	12.49	12.49	12.49
		1857.5 (18675)	12.45	12.56	12.64
	36RB-High (38)	1902.5 (19125)	12.61	12.43	12.61
		1880 (18900)	12.62	12.58	12.39
		1857.5 (18675)	12.67	12.44	12.57
	36RB-Middle (19)	1902.5 (19125)	12.51	12.63	12.62
		1880 (18900)	12.60	12.67	12.49
		1857.5 (18675)	12.50	12.60	12.58
	36RB-Low (0)	1902.5 (19125)	12.67	12.48	12.52
		1880 (18900)	12.54	12.50	12.51
		1857.5 (18675)	12.44	12.53	12.53
	75RB (0)	1902.5 (19125)	12.46	12.48	12.63
		1880 (18900)	12.49	12.61	12.46
		1857.5 (18675)	12.52	12.55	12.47
20MHz	1RB-High (99)	1900 (19100)	12.57	12.56	12.61
		1880 (18900)	12.57	12.56	12.55
		1860 (18700)	12.59	12.53	12.64
	1RB-Middle (50)	1900 (19100)	12.64	12.61	12.67
		1880 (18900)	12.71	12.64	12.69
		1860 (18700)	12.60	12.59	12.57
	1RB-Low (0)	1900 (19100)	12.57	12.51	12.49
		1880 (18900)	12.57	12.53	12.54
		1860 (18700)	12.58	12.66	12.55
	50RB-High (50)	1900 (19100)	12.52	12.56	12.55
		1880 (18900)	12.52	12.60	12.49
		1860 (18700)	12.59	12.53	12.54

	50RB-Middle (25)	1900 (19100)	12.57	12.58	12.52
		1880 (18900)	12.62	12.58	12.50
		1860 (18700)	12.53	12.61	12.66
	50RB-Low (0)	1900 (19100)	12.57	12.59	12.59
		1880 (18900)	12.51	12.44	12.45
		1860 (18700)	12.51	12.49	12.59
	100RB (0)	1900 (19100)	12.53	12.48	12.59
		1880 (18900)	12.51	12.59	12.52
		1860 (18700)	12.51	12.54	12.52

LTE B2 ANT3 (Power Level E1)

LTE B2 ANT3					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	10.47	10.56	10.60
		1880 (18900)	10.58	10.50	10.52
		1850.7 (18607)	10.39	10.45	10.38
	1RB-Middle (3)	1909.3 (19193)	10.54	10.40	10.64
		1880 (18900)	10.69	10.63	10.68
		1850.7 (18607)	10.46	10.64	10.44
	1RB-Low (0)	1909.3 (19193)	10.57	10.52	10.60
		1880 (18900)	10.48	10.61	10.48
		1850.7 (18607)	10.54	10.38	10.54
	3RB-High (3)	1909.3 (19193)	10.58	10.37	10.58
		1880 (18900)	10.41	10.45	10.35
		1850.7 (18607)	10.62	10.44	10.56
	3RB-Middle (1)	1909.3 (19193)	10.61	10.52	10.61
		1880 (18900)	10.63	10.45	10.58
		1850.7 (18607)	10.58	10.54	10.73
	3RB-Low (0)	1909.3 (19193)	10.45	10.37	10.50
		1880 (18900)	10.51	10.45	10.56
		1850.7 (18607)	10.42	10.55	10.64
	6RB (0)	1909.3 (19193)	10.34	10.59	10.32
		1880 (18900)	10.34	10.42	10.44
		1850.7 (18607)	10.55	10.47	10.49
3MHz	1RB-High (14)	1908.5 (19185)	10.55	10.53	10.49
		1880 (18900)	10.61	10.41	10.42
		1851.5 (18615)	10.62	10.38	10.38
	1RB-Middle (7)	1908.5 (19185)	10.50	10.55	10.60
		1880 (18900)	10.70	10.65	10.63
		1851.5 (18615)	10.65	10.44	10.42
	1RB-Low (0)	1908.5 (19185)	10.58	10.54	10.57

		1880 (18900)	10.38	10.43	10.50	
		1851.5 (18615)	10.51	10.39	10.47	
		1908.5 (19185)	10.50	10.33	10.53	
	8RB-High (7)	1880 (18900)	10.50	10.62	10.36	
		1851.5 (18615)	10.63	10.34	10.42	
		1908.5 (19185)	10.62	10.54	10.40	
	8RB-Middle (4)	1880 (18900)	10.56	10.32	10.57	
		1851.5 (18615)	10.50	10.41	10.65	
		1908.5 (19185)	10.47	10.35	10.68	
	8RB-Low (0)	1880 (18900)	10.39	10.53	10.51	
		1851.5 (18615)	10.50	10.59	10.56	
		1908.5 (19185)	10.53	10.64	10.29	
	15RB (0)	1880 (18900)	10.45	10.62	10.35	
		1851.5 (18615)	10.39	10.40	10.28	
		1907.5 (19175)	10.45	10.44	10.60	
5MHz	1RB-High (24)	1880 (18900)	10.49	10.40	10.47	
		1852.5 (18625)	10.50	10.52	10.34	
		1907.5 (19175)	10.57	10.41	10.52	
	1RB-Middle (12)	1880 (18900)	10.68	10.66	10.67	
		1852.5 (18625)	10.44	10.52	10.44	
		1907.5 (19175)	10.41	10.57	10.68	
	1RB-Low (0)	1880 (18900)	10.48	10.59	10.60	
		1852.5 (18625)	10.52	10.60	10.58	
		1907.5 (19175)	10.34	10.36	10.56	
	12RB-High (13)	1880 (18900)	10.45	10.53	10.39	
		1852.5 (18625)	10.65	10.48	10.42	
		1907.5 (19175)	10.55	10.65	10.58	
	12RB-Middle (6)	1880 (18900)	10.59	10.44	10.53	
		1852.5 (18625)	10.41	10.55	10.56	
		1907.5 (19175)	10.46	10.42	10.60	
	12RB-Low (0)	1880 (18900)	10.55	10.51	10.45	
		1852.5 (18625)	10.40	10.36	10.41	
		1907.5 (19175)	10.58	10.41	10.51	
	25RB (0)	1880 (18900)	10.56	10.43	10.33	
		1852.5 (18625)	10.42	10.38	10.36	
		1905 (19150)	10.42	10.56	10.45	
	10MHz	1RB-High (49)	1880 (18900)	10.40	10.57	10.48
			1855 (18650)	10.61	10.38	10.57
			1905 (19150)	10.53	10.60	10.51
1RB-Middle (24)		1880 (18900)	10.61	10.66	10.56	
		1855 (18650)	10.62	10.50	10.47	
		1905 (19150)	10.61	10.47	10.65	
1RB-Low (0)		1905 (19150)	10.61	10.47	10.65	

		1880 (18900)	10.51	10.49	10.63	
		1855 (18650)	10.53	10.35	10.67	
		1905 (19150)	10.53	10.29	10.33	
	25RB-High (25)	1880 (18900)	10.35	10.63	10.50	
		1855 (18650)	10.47	10.55	10.62	
		1905 (19150)	10.51	10.58	10.53	
	25RB-Middle (12)	1880 (18900)	10.57	10.36	10.55	
		1855 (18650)	10.49	10.43	10.71	
		1905 (19150)	10.54	10.42	10.52	
	25RB-Low (0)	1880 (18900)	10.36	10.58	10.55	
		1855 (18650)	10.50	10.52	10.53	
		1905 (19150)	10.39	10.50	10.45	
	50RB (0)	1880 (18900)	10.44	10.65	10.30	
		1855 (18650)	10.33	10.33	10.35	
		1902.5 (19125)	10.44	10.36	10.44	
15MHz	1RB-High (74)	1880 (18900)	10.38	10.39	10.61	
		1857.5 (18675)	10.60	10.52	10.36	
		1902.5 (19125)	10.45	10.51	10.67	
	1RB-Middle (37)	1880 (18900)	10.61	10.65	10.72	
		1857.5 (18675)	10.53	10.49	10.38	
		1902.5 (19125)	10.46	10.56	10.44	
	1RB-Low (0)	1880 (18900)	10.52	10.52	10.44	
		1857.5 (18675)	10.45	10.44	10.70	
		1902.5 (19125)	10.43	10.43	10.52	
	36RB-High (38)	1880 (18900)	10.54	10.56	10.53	
		1857.5 (18675)	10.60	10.57	10.55	
		1902.5 (19125)	10.54	10.56	10.52	
	36RB-Middle (19)	1880 (18900)	10.64	10.31	10.40	
		1857.5 (18675)	10.48	10.52	10.61	
		1902.5 (19125)	10.55	10.55	10.70	
	36RB-Low (0)	1880 (18900)	10.53	10.61	10.54	
		1857.5 (18675)	10.58	10.37	10.39	
		1902.5 (19125)	10.36	10.47	10.29	
	75RB (0)	1880 (18900)	10.48	10.51	10.35	
		1857.5 (18675)	10.36	10.31	10.31	
		1900 (19100)	10.52	10.50	10.56	
	20MHz	1RB-High (99)	1880 (18900)	10.52	10.51	10.56
			1860 (18700)	10.54	10.48	10.47
			1900 (19100)	10.59	10.55	10.65
		1RB-Middle (50)	1880 (18900)	10.61	10.62	10.66
			1860 (18700)	10.55	10.55	10.52
			1900 (19100)	10.53	10.57	10.58

		1880 (18900)	10.53	10.53	10.56
		1860 (18700)	10.54	10.50	10.61
	50RB-High (50)	1900 (19100)	10.48	10.41	10.48
		1880 (18900)	10.49	10.57	10.50
		1860 (18700)	10.55	10.48	10.54
	50RB-Middle (25)	1900 (19100)	10.53	10.61	10.52
		1880 (18900)	10.63	10.44	10.52
		1860 (18700)	10.56	10.50	10.64
	50RB-Low (0)	1900 (19100)	10.52	10.47	10.60
		1880 (18900)	10.48	10.56	10.50
		1860 (18700)	10.48	10.50	10.54
	100RB (0)	1900 (19100)	10.49	10.55	10.42
		1880 (18900)	10.48	10.56	10.42
		1860 (18700)	10.48	10.45	10.40

LTE B66 ANT3 (Power Level A1)

LTE B66 ANT3						
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	
1.4MHz	1RB-High (5)	1779.3 (132665)	23.88	22.84	21.91	
		1745 (132322)	23.84	23.04	22.13	
		1710.7 (131979)	23.84	23.04	22.08	
	1RB-Middle (3)	1779.3 (132665)	23.97	22.89	22.06	
		1745 (132322)	24.01	23.10	22.06	
		1710.7 (131979)	23.89	23.08	22.14	
	1RB-Low (0)	1779.3 (132665)	23.86	23.13	21.99	
		1745 (132322)	23.79	23.25	22.14	
		1710.7 (131979)	23.76	23.07	21.99	
	3RB-High (3)	1779.3 (132665)	23.74	22.91	21.95	
		1745 (132322)	23.83	22.99	22.07	
		1710.7 (131979)	23.91	23.00	22.06	
	3RB-Middle (1)	1779.3 (132665)	23.88	23.13	22.08	
		1745 (132322)	24.08	23.09	22.30	
		1710.7 (131979)	23.84	23.26	21.99	
	3RB-Low (0)	1779.3 (132665)	23.77	23.10	21.89	
		1745 (132322)	23.86	23.18	22.18	
		1710.7 (131979)	23.96	23.08	22.01	
	6RB (0)	1779.3 (132665)	22.94	22.06	21.16	
		1745 (132322)	23.14	22.09	21.09	
		1710.7 (131979)	23.06	22.07	20.92	
	3MHz	1RB-High (14)	1778.5 (132657)	23.88	22.91	22.04
			1745 (132322)	23.75	23.11	22.00

		1711.5 (131987)	23.70	23.24	22.09
	1RB-Middle (7)	1778.5 (132657)	23.89	23.07	22.07
		1745 (132322)	24.04	23.11	22.29
		1711.5 (131987)	23.81	23.17	22.08
	1RB-Low (0)	1778.5 (132657)	23.74	22.91	22.01
		1745 (132322)	24.01	23.03	22.17
		1711.5 (131987)	23.78	22.93	22.17
	8RB-High (7)	1778.5 (132657)	22.90	22.15	21.08
		1745 (132322)	23.29	22.21	21.04
		1711.5 (131987)	23.08	22.13	21.12
	8RB-Middle (4)	1778.5 (132657)	22.82	22.20	21.07
		1745 (132322)	23.22	21.25	21.16
		1711.5 (131987)	23.15	22.20	20.98
	8RB-Low (0)	1778.5 (132657)	22.85	22.10	21.06
		1745 (132322)	23.19	22.11	21.21
		1711.5 (131987)	22.97	21.94	20.92
	15RB (0)	1778.5 (132657)	23.00	22.03	21.02
		1745 (132322)	23.07	22.18	21.10
		1711.5 (131987)	23.16	21.99	21.03
5MHz	1RB-High (24)	1777.5 (132647)	23.97	22.88	22.08
		1745 (132322)	23.84	23.14	22.06
		1712.5 (131997)	23.84	23.18	21.95
	1RB-Middle (12)	1777.5 (132647)	24.07	23.10	22.12
		1745 (132322)	24.13	23.34	22.18
		1712.5 (131997)	24.00	23.19	22.05
	1RB-Low (0)	1777.5 (132647)	23.85	23.04	21.95
		1745 (132322)	23.82	23.13	22.04
		1712.5 (131997)	23.97	23.01	22.18
	12RB-High (13)	1777.5 (132647)	23.04	22.14	21.18
		1745 (132322)	23.06	22.25	21.09
		1712.5 (131997)	23.08	22.03	21.07
	12RB-Middle (6)	1777.5 (132647)	22.81	22.04	21.21
		1745 (132322)	23.09	21.04	21.23
		1712.5 (131997)	23.21	22.13	21.16
	12RB-Low (0)	1777.5 (132647)	22.95	22.13	21.24
		1745 (132322)	23.12	22.19	21.18
		1712.5 (131997)	22.92	22.11	20.90
	25RB (0)	1777.5 (132647)	22.87	22.18	21.08
		1745 (132322)	23.07	22.23	21.14
		1712.5 (131997)	22.96	22.15	21.11
10MHz	1RB-High (49)	1775 (132622)	23.79	22.92	21.89
		1745 (132322)	23.88	23.01	21.91

		1715 (132022)	23.78	23.16	22.10
	1RB-Middle (24)	1775 (132622)	23.98	22.90	22.19
		1745 (132322)	24.10	23.28	22.10
		1715 (132022)	23.88	23.21	22.01
	1RB-Low (0)	1775 (132622)	23.74	22.99	21.94
		1745 (132322)	23.92	23.08	22.10
		1715 (132022)	23.97	22.91	22.05
	25RB-High (25)	1775 (132622)	22.87	22.23	21.07
		1745 (132322)	23.30	22.06	21.15
		1715 (132022)	23.19	22.13	20.99
	25RB-Middle (12)	1775 (132622)	22.84	21.98	21.15
		1745 (132322)	23.19	21.13	21.04
		1715 (132022)	23.04	22.03	21.18
	25RB-Low (0)	1775 (132622)	23.06	22.11	21.21
		1745 (132322)	23.03	22.10	21.07
		1715 (132022)	22.81	22.08	20.91
	50RB (0)	1775 (132622)	23.06	22.16	21.22
		1745 (132322)	23.23	22.17	21.06
		1715 (132022)	23.18	22.17	20.94
15MHz	1RB-High (74)	1772.5 (132597)	23.82	22.98	21.96
		1745 (132322)	23.88	23.03	22.08
		1717.5 (132047)	23.73	23.16	22.10
	1RB-Middle (37)	1772.5 (132597)	23.93	23.04	22.22
		1745 (132322)	24.12	23.10	22.12
		1717.5 (132047)	23.88	23.04	22.16
	1RB-Low (0)	1772.5 (132597)	23.63	22.91	22.07
		1745 (132322)	23.94	23.15	22.16
		1717.5 (132047)	23.84	22.92	22.03
	36RB-High (38)	1772.5 (132597)	22.93	22.11	20.99
		1745 (132322)	23.26	22.20	21.07
		1717.5 (132047)	23.15	21.98	21.02
	36RB-Middle (19)	1772.5 (132597)	22.90	22.12	21.00
		1745 (132322)	23.15	21.10	21.06
		1717.5 (132047)	23.12	22.03	21.14
	36RB-Low (0)	1772.5 (132597)	22.99	22.20	21.04
		1745 (132322)	23.06	22.06	21.19
		1717.5 (132047)	22.83	22.02	20.99
75RB (0)	1772.5 (132597)	23.04	22.16	21.22	
	1745 (132322)	23.24	22.04	21.24	
	1717.5 (132047)	22.99	22.10	21.13	
20MHz	1RB-High (99)	1770 (132572)	23.88	22.92	21.98
		1745 (132322)	23.88	23.08	22.04

		1720 (132072)	23.83	23.15	22.06
1RB-Middle (50)		1770 (132572)	23.98	23.03	22.13
		1745 (132322)	24.03	23.24	22.21
		1720 (132072)	23.96	23.19	22.09
1RB-Low (0)		1770 (132572)	23.78	23.05	21.99
		1745 (132322)	23.91	23.17	22.13
		1720 (132072)	23.91	22.99	22.09
50RB-High (50)		1770 (132572)	22.96	22.14	21.13
		1745 (132322)	23.21	22.19	21.17
		1720 (132072)	23.14	22.11	21.04
50RB-Middle (25)		1770 (132572)	22.96	22.13	21.11
		1745 (132322)	23.18	21.19	21.16
		1720 (132072)	23.18	22.17	21.13
50RB-Low (0)		1770 (132572)	22.97	22.14	21.16
		1745 (132322)	23.14	22.13	21.14
		1720 (132072)	22.91	22.07	21.02
100RB (0)		1770 (132572)	22.98	22.18	21.15
		1745 (132322)	23.15	22.15	21.15
		1720 (132072)	23.09	22.09	21.05

LTE B66 ANT3 (Power Level D1)

LTE B66 ANT3					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	12.37	12.30	12.31
		1745 (132322)	12.12	12.34	12.44
		1710.7 (131979)	12.31	12.27	12.09
	1RB-Middle (3)	1779.3 (132665)	12.32	12.22	12.44
		1745 (132322)	12.32	12.27	12.30
		1710.7 (131979)	12.22	12.27	12.33
	1RB-Low (0)	1779.3 (132665)	12.09	12.14	12.33
		1745 (132322)	12.27	12.21	12.16
		1710.7 (131979)	12.19	12.15	12.09
	3RB-High (3)	1779.3 (132665)	12.18	12.25	12.08
		1745 (132322)	12.17	12.17	12.20
		1710.7 (131979)	12.32	12.19	12.32
	3RB-Middle (1)	1779.3 (132665)	12.35	12.17	12.34
		1745 (132322)	12.23	12.42	12.25
		1710.7 (131979)	12.38	12.24	12.32
	3RB-Low (0)	1779.3 (132665)	12.30	12.04	12.34
		1745 (132322)	12.26	12.33	12.21
		1710.7 (131979)	12.25	12.12	12.30

		1779.3 (132665)	12.30	12.28	11.99	
	6RB (0)	1745 (132322)	12.31	12.17	12.31	
		1710.7 (131979)	12.36	12.25	12.26	
3MHz	1RB-High (14)	1778.5 (132657)	12.36	12.26	12.26	
		1745 (132322)	12.30	12.29	12.38	
		1711.5 (131987)	12.33	12.21	12.28	
	1RB-Middle (7)	1778.5 (132657)	12.20	12.31	12.44	
		1745 (132322)	12.26	12.29	12.28	
		1711.5 (131987)	12.33	12.37	12.43	
	1RB-Low (0)	1778.5 (132657)	12.26	12.22	12.14	
		1745 (132322)	12.13	12.15	12.07	
		1711.5 (131987)	12.30	12.12	12.20	
	8RB-High (7)	1778.5 (132657)	12.24	12.12	12.16	
		1745 (132322)	12.30	12.30	12.35	
		1711.5 (131987)	12.21	12.05	12.26	
	8RB-Middle (4)	1778.5 (132657)	12.08	12.16	12.18	
		1745 (132322)	12.35	12.41	12.37	
		1711.5 (131987)	12.18	12.41	12.37	
	8RB-Low (0)	1778.5 (132657)	12.12	12.29	12.09	
		1745 (132322)	12.18	12.36	12.26	
		1711.5 (131987)	12.12	11.97	12.12	
	15RB (0)	1778.5 (132657)	12.13	12.07	11.99	
		1745 (132322)	12.19	12.32	12.32	
		1711.5 (131987)	12.17	12.18	12.17	
	5MHz	1RB-High (24)	1777.5 (132647)	12.17	12.12	12.11
			1745 (132322)	12.21	12.26	12.19
			1712.5 (131997)	12.33	12.16	12.26
1RB-Middle (12)		1777.5 (132647)	12.25	12.29	12.38	
		1745 (132322)	12.21	12.34	12.22	
		1712.5 (131997)	12.17	12.18	12.26	
1RB-Low (0)		1777.5 (132647)	12.17	12.00	12.37	
		1745 (132322)	12.17	12.30	12.24	
		1712.5 (131997)	12.25	12.07	12.16	
12RB-High (13)		1777.5 (132647)	12.27	12.17	12.32	
		1745 (132322)	12.28	12.20	12.30	
		1712.5 (131997)	12.20	12.15	12.32	
12RB-Middle (6)		1777.5 (132647)	12.28	12.21	12.21	
		1745 (132322)	12.28	12.32	12.46	
		1712.5 (131997)	12.16	12.41	12.31	
12RB-Low (0)		1777.5 (132647)	12.08	12.28	12.17	
		1745 (132322)	12.18	12.23	12.24	
		1712.5 (131997)	12.17	12.20	12.11	

		1777.5 (132647)	12.30	12.26	12.05	
	25RB (0)	1745 (132322)	12.22	12.37	12.29	
		1712.5 (131997)	12.14	12.06	12.27	
10MHz	1RB-High (49)	1775 (132622)	12.17	12.29	12.18	
		1745 (132322)	12.23	12.28	12.37	
		1715 (132022)	12.12	12.27	12.12	
	1RB-Middle (24)	1775 (132622)	12.40	12.21	12.26	
		1745 (132322)	12.40	12.40	12.12	
		1715 (132022)	12.38	12.33	12.43	
	1RB-Low (0)	1775 (132622)	12.31	12.12	12.19	
		1745 (132322)	12.38	12.16	12.08	
		1715 (132022)	12.20	12.20	12.17	
	25RB-High (25)	1775 (132622)	12.05	12.23	12.33	
		1745 (132322)	12.34	12.42	12.35	
		1715 (132022)	12.25	12.08	12.44	
	25RB-Middle (12)	1775 (132622)	12.22	12.22	12.10	
		1745 (132322)	12.26	12.27	12.39	
		1715 (132022)	12.31	12.26	12.43	
	25RB-Low (0)	1775 (132622)	12.26	12.22	12.28	
		1745 (132322)	12.25	12.35	12.37	
		1715 (132022)	12.22	11.98	12.30	
	50RB (0)	1775 (132622)	12.21	12.28	12.11	
		1745 (132322)	12.34	12.13	12.10	
		1715 (132022)	12.12	12.15	12.26	
	15MHz	1RB-High (74)	1772.5 (132597)	12.21	12.18	12.22
			1745 (132322)	12.14	12.16	12.42
			1717.5 (132047)	12.33	12.31	12.26
		1RB-Middle (37)	1772.5 (132597)	12.34	12.33	12.34
			1745 (132322)	12.35	12.34	12.31
			1717.5 (132047)	12.22	12.18	12.41
1RB-Low (0)		1772.5 (132597)	12.06	12.12	12.24	
		1745 (132322)	12.15	12.31	12.29	
		1717.5 (132047)	12.19	12.15	12.16	
36RB-High (38)		1772.5 (132597)	12.10	12.05	12.20	
		1745 (132322)	12.24	12.32	12.34	
		1717.5 (132047)	12.22	12.07	12.31	
36RB-Middle (19)		1772.5 (132597)	12.27	12.04	12.11	
		1745 (132322)	12.23	12.43	12.45	
		1717.5 (132047)	12.34	12.17	12.27	
36RB-Low (0)		1772.5 (132597)	12.16	12.19	12.14	
		1745 (132322)	12.32	12.38	12.33	
		1717.5 (132047)	12.22	12.15	12.22	

	75RB (0)	1772.5 (132597)	12.30	12.07	12.16
		1745 (132322)	12.31	12.12	12.30
		1717.5 (132047)	12.30	12.12	12.14
20MHz	1RB-High (99)	1770 (132572)	12.27	12.25	12.23
		1745 (132322)	12.27	12.30	12.34
		1720 (132072)	12.24	12.22	12.22
	1RB-Middle (50)	1770 (132572)	12.32	12.31	12.36
		1745 (132322)	12.35	12.39	12.27
		1720 (132072)	12.31	12.30	12.33
	1RB-Low (0)	1770 (132572)	12.21	12.14	12.27
		1745 (132322)	12.28	12.26	12.20
		1720 (132072)	12.28	12.20	12.24
	50RB-High (50)	1770 (132572)	12.19	12.18	12.26
		1745 (132322)	12.32	12.35	12.26
		1720 (132072)	12.28	12.20	12.35
	50RB-Middle (25)	1770 (132572)	12.19	12.19	12.11
		1745 (132322)	12.31	12.35	12.38
		1720 (132072)	12.31	12.32	12.33
	50RB-Low (0)	1770 (132572)	12.19	12.22	12.24
		1745 (132322)	12.28	12.34	12.36
		1720 (132072)	12.16	12.11	12.22
	100RB (0)	1770 (132572)	12.20	12.22	12.13
		1745 (132322)	12.29	12.27	12.23
		1720 (132072)	12.26	12.21	12.28

LTE B66 ANT3 (Power Level E1)

LTE B66 ANT3					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	10.39	10.52	10.28
		1745 (132322)	10.37	10.58	10.24
		1710.7 (131979)	10.29	10.39	10.38
	1RB-Middle (3)	1779.3 (132665)	10.40	10.42	10.50
		1745 (132322)	10.37	10.50	10.52
		1710.7 (131979)	10.42	10.60	10.54
	1RB-Low (0)	1779.3 (132665)	10.41	10.20	10.29
		1745 (132322)	10.34	10.31	10.29
		1710.7 (131979)	10.47	10.31	10.40
	3RB-High (3)	1779.3 (132665)	10.45	10.42	10.31
		1745 (132322)	10.47	10.48	10.25
		1710.7 (131979)	10.31	10.43	10.29
	3RB-Middle (1)	1779.3 (132665)	10.40	10.42	10.34

	3RB-Low (0)	1745 (132322)	10.54	10.51	10.55	
		1710.7 (131979)	10.55	10.51	10.50	
		1779.3 (132665)	10.25	10.23	10.28	
		1745 (132322)	10.43	10.28	10.24	
		1710.7 (131979)	10.40	10.46	10.32	
		1779.3 (132665)	10.37	10.37	10.42	
	6RB (0)	1745 (132322)	10.31	10.38	10.44	
		1710.7 (131979)	10.43	10.43	10.44	
		1778.5 (132657)	10.45	10.62	10.24	
	3MHz	1RB-High (14)	1745 (132322)	10.40	10.57	10.36
			1711.5 (131987)	10.38	10.48	10.40
			1778.5 (132657)	10.45	10.56	10.43
1RB-Middle (7)		1745 (132322)	10.37	10.37	10.53	
		1711.5 (131987)	10.32	10.45	10.58	
		1778.5 (132657)	10.41	10.25	10.33	
1RB-Low (0)		1745 (132322)	10.50	10.37	10.28	
		1711.5 (131987)	10.39	10.28	10.45	
		1778.5 (132657)	10.28	10.29	10.18	
8RB-High (7)		1745 (132322)	10.54	10.37	10.45	
		1711.5 (131987)	10.47	10.40	10.46	
		1778.5 (132657)	10.41	10.26	10.26	
8RB-Middle (4)		1745 (132322)	10.42	10.52	10.54	
		1711.5 (131987)	10.50	10.34	10.44	
		1778.5 (132657)	10.47	10.41	10.17	
8RB-Low (0)		1745 (132322)	10.50	10.38	10.50	
		1711.5 (131987)	10.38	10.12	10.34	
		1778.5 (132657)	10.41	10.16	10.43	
15RB (0)		1745 (132322)	10.48	10.40	10.44	
		1711.5 (131987)	10.49	10.37	10.54	
		1777.5 (132647)	10.34	10.50	10.48	
5MHz		1RB-High (24)	1745 (132322)	10.30	10.56	10.30
			1712.5 (131997)	10.37	10.27	10.20
			1777.5 (132647)	10.33	10.43	10.37
	1RB-Middle (12)	1745 (132322)	10.47	10.59	10.32	
		1712.5 (131997)	10.52	10.50	10.40	
		1777.5 (132647)	10.41	10.42	10.37	
	1RB-Low (0)	1745 (132322)	10.39	10.29	10.40	
		1712.5 (131997)	10.51	10.41	10.36	
		1777.5 (132647)	10.30	10.25	10.39	
	12RB-High (13)	1745 (132322)	10.33	10.39	10.42	
		1712.5 (131997)	10.47	10.38	10.28	
		1777.5 (132647)	10.45	10.40	10.22	
	12RB-Middle (6)	1777.5 (132647)	10.45	10.40	10.22	

		1745 (132322)	10.40	10.47	10.58	
		1712.5 (131997)	10.55	10.34	10.58	
		1777.5 (132647)	10.41	10.34	10.21	
	12RB-Low (0)	1745 (132322)	10.49	10.36	10.54	
		1712.5 (131997)	10.44	10.18	10.35	
		1777.5 (132647)	10.38	10.32	10.30	
	25RB (0)	1745 (132322)	10.36	10.35	10.44	
		1712.5 (131997)	10.45	10.37	10.43	
		1775 (132622)	10.41	10.55	10.27	
10MHz	1RB-High (49)	1745 (132322)	10.39	10.36	10.43	
		1715 (132022)	10.29	10.27	10.40	
		1775 (132622)	10.44	10.54	10.53	
	1RB-Middle (24)	1745 (132322)	10.58	10.37	10.34	
		1715 (132022)	10.41	10.57	10.46	
		1775 (132622)	10.29	10.22	10.31	
	1RB-Low (0)	1745 (132322)	10.39	10.40	10.49	
		1715 (132022)	10.39	10.27	10.46	
		1775 (132622)	10.41	10.25	10.17	
	25RB-High (25)	1745 (132322)	10.46	10.39	10.50	
		1715 (132022)	10.35	10.33	10.29	
		1775 (132622)	10.31	10.18	10.40	
	25RB-Middle (12)	1745 (132322)	10.44	10.42	10.56	
		1715 (132022)	10.51	10.54	10.38	
		1775 (132622)	10.33	10.47	10.27	
	25RB-Low (0)	1745 (132322)	10.40	10.44	10.45	
		1715 (132022)	10.19	10.17	10.47	
		1775 (132622)	10.29	10.27	10.42	
	50RB (0)	1745 (132322)	10.40	10.53	10.37	
		1715 (132022)	10.44	10.45	10.55	
		1772.5 (132597)	10.50	10.53	10.36	
	15MHz	1RB-High (74)	1745 (132322)	10.50	10.45	10.46
			1717.5 (132047)	10.49	10.38	10.40
			1772.5 (132597)	10.40	10.54	10.53
1RB-Middle (37)		1745 (132322)	10.53	10.38	10.45	
		1717.5 (132047)	10.47	10.44	10.56	
		1772.5 (132597)	10.34	10.38	10.43	
1RB-Low (0)		1745 (132322)	10.48	10.31	10.38	
		1717.5 (132047)	10.37	10.36	10.49	
		1772.5 (132597)	10.23	10.40	10.37	
36RB-High (38)		1745 (132322)	10.41	10.54	10.34	
		1717.5 (132047)	10.32	10.39	10.42	
		1772.5 (132597)	10.32	10.33	10.31	
36RB-Middle (19)		1772.5 (132597)	10.32	10.33	10.31	

	36RB-Low (0)	1745 (132322)	10.53	10.37	10.42	
		1717.5 (132047)	10.57	10.34	10.55	
		1772.5 (132597)	10.25	10.30	10.35	
		1745 (132322)	10.42	10.51	10.48	
		1717.5 (132047)	10.19	10.18	10.34	
		1772.5 (132597)	10.34	10.33	10.37	
	75RB (0)	1745 (132322)	10.50	10.56	10.36	
		1717.5 (132047)	10.34	10.38	10.41	
		1772.5 (132597)	10.34	10.33	10.37	
	20MHz	1RB-High (99)	1770 (132572)	10.44	10.52	10.38
			1745 (132322)	10.44	10.49	10.39
			1720 (132072)	10.42	10.42	10.35
1RB-Middle (50)		1770 (132572)	10.45	10.49	10.47	
		1745 (132322)	10.48	10.52	10.47	
		1720 (132072)	10.47	10.55	10.55	
1RB-Low (0)		1770 (132572)	10.39	10.34	10.33	
		1745 (132322)	10.45	10.38	10.39	
		1720 (132072)	10.45	10.41	10.40	
50RB-High (50)		1770 (132572)	10.36	10.31	10.29	
		1745 (132322)	10.48	10.47	10.43	
		1720 (132072)	10.45	10.37	10.38	
50RB-Middle (25)		1770 (132572)	10.36	10.31	10.34	
		1745 (132322)	10.47	10.43	10.52	
		1720 (132072)	10.47	10.48	10.53	
50RB-Low (0)		1770 (132572)	10.37	10.37	10.30	
		1745 (132322)	10.45	10.51	10.45	
		1720 (132072)	10.34	10.26	10.38	
100RB (0)		1770 (132572)	10.37	10.30	10.45	
		1745 (132322)	10.45	10.46	10.37	
		1720 (132072)	10.42	10.43	10.49	

SAR test is not required since maximum output power when downlink carrier aggregation active is not more than 1/4 dB higher than the maximum output power measured when downlink carrier aggregation inactive.

The conducted power measurement results of LTE uplink CA are as below:

CA_7C- Power Level A1

PCC					SCC				conducted power (dBm)
PCC Bandwidth	UL channel	DL channel	UL RB	UL RB OFFSET	SCC Bandwidth	DL channel	UL RB	UL RB OFFSET	
20M	21350	3350	1	99	20M	3152	1	0	22.63
20M	21350	3350	1	99	15M	3179	1	0	22.73
20M	21350	3350	1	99	10M	3206	1	0	22.66
20M	20850	2850	1	99	20M	3048	1	0	22.91
20M	20850	2850	1	99	15M	3021	1	0	23.03
20M	20850	2850	1	99	10M	2994	1	0	22.01
15M	21375	3375	1	74	15M	3225	1	0	22.87
15M	20825	2825	1	74	15M	2975	1	0	23.07
15M	20825	2825	1	74	10M	2945	1	0	23.13
20M	21350	3350	1	0	20M	3152	1	99	23.27
20M	21350	3350	1	0	15M	3179	1	74	23.12
20M	21350	3350	1	0	10M	3206	1	49	23.15
20M	20850	2850	1	0	20M	3048	1	99	22.23
20M	20850	2850	1	0	15M	3021	1	74	22.31
20M	20850	2850	1	0	10M	2994	1	49	22.33
15M	21375	3375	1	0	15M	3225	1	74	22.83
15M	20825	2825	1	0	15M	2975	1	74	22.71
15M	20825	2825	1	0	10M	2945	1	49	22.83

CA_7C- Power Level B1

PCC					SCC				conducted power (dBm)
PCC Bandwidth	UL channel	DL channel	UL RB	UL RB OFFSET	SCC Bandwidth	DL channel	UL RB	UL RB OFFSET	
20M	21350	3350	1	99	20M	3152	1	0	13.37
20M	21350	3350	1	99	15M	3179	1	0	13.41
20M	21350	3350	1	99	10M	3206	1	0	13.42
20M	20850	2850	1	99	20M	3048	1	0	13.51
20M	20850	2850	1	99	15M	3021	1	0	13.57
20M	20850	2850	1	99	10M	2994	1	0	13.08
15M	21375	3375	1	74	15M	3225	1	0	13.50
15M	20825	2825	1	74	15M	2975	1	0	13.60
15M	20825	2825	1	74	10M	2945	1	0	13.63
20M	21350	3350	1	0	20M	3152	1	99	13.73
20M	21350	3350	1	0	15M	3179	1	74	13.66
20M	21350	3350	1	0	10M	3206	1	49	13.67
20M	20850	2850	1	0	20M	3048	1	99	13.20
20M	20850	2850	1	0	15M	3021	1	74	13.23
20M	20850	2850	1	0	10M	2994	1	49	13.22
15M	21375	3375	1	0	15M	3225	1	74	13.46
15M	20825	2825	1	0	15M	2975	1	74	13.40
15M	20825	2825	1	0	10M	2945	1	49	13.47

CA_7C- Power Level C1/D1

PCC					SCC				conducted power (dBm)
PCC Bandwidth	UL channel	DL channel	UL RB	UL RB OFFSET	SCC Bandwidth	DL channel	UL RB	UL RB OFFSET	
20M	21350	3350	1	99	20M	3152	1	0	11.38
20M	21350	3350	1	99	15M	3179	1	0	11.44
20M	21350	3350	1	99	10M	3206	1	0	11.43
20M	20850	2850	1	99	20M	3048	1	0	11.50
20M	20850	2850	1	99	15M	3021	1	0	11.57
20M	20850	2850	1	99	10M	2994	1	0	11.10
15M	21375	3375	1	74	15M	3225	1	0	11.48
15M	20825	2825	1	74	15M	2975	1	0	11.61
15M	20825	2825	1	74	10M	2945	1	0	11.62
20M	21350	3350	1	0	20M	3152	1	99	11.66
20M	21350	3350	1	0	15M	3179	1	74	11.64
20M	21350	3350	1	0	10M	3206	1	49	11.63
20M	20850	2850	1	0	20M	3048	1	99	11.20
20M	20850	2850	1	0	15M	3021	1	74	11.21
20M	20850	2850	1	0	10M	2994	1	49	11.26
15M	21375	3375	1	0	15M	3225	1	74	11.51
15M	20825	2825	1	0	15M	2975	1	74	11.41
15M	20825	2825	1	0	10M	2945	1	49	11.48

CA_7C- Power Level E1

PCC					SCC				conducted power (dBm)
PCC Bandwidth	UL channel	DL channel	UL RB	UL RB OFFSET	SCC Bandwidth	DL channel	UL RB	UL RB OFFSET	
20M	21350	3350	1	99	20M	3152	1	0	9.45
20M	21350	3350	1	99	15M	3179	1	0	9.49
20M	21350	3350	1	99	10M	3206	1	0	9.46
20M	20850	2850	1	99	20M	3048	1	0	9.56
20M	20850	2850	1	99	15M	3021	1	0	9.61
20M	20850	2850	1	99	10M	2994	1	0	9.19
15M	21375	3375	1	74	15M	3225	1	0	9.55
15M	20825	2825	1	74	15M	2975	1	0	9.63
15M	20825	2825	1	74	10M	2945	1	0	9.66
20M	21350	3350	1	0	20M	3152	1	99	9.72
20M	21350	3350	1	0	15M	3179	1	74	9.65
20M	21350	3350	1	0	10M	3206	1	49	9.66
20M	20850	2850	1	0	20M	3048	1	99	9.28
20M	20850	2850	1	0	15M	3021	1	74	9.31
20M	20850	2850	1	0	10M	2994	1	49	9.32
15M	21375	3375	1	0	15M	3225	1	74	9.53
15M	20825	2825	1	0	15M	2975	1	74	9.48
15M	20825	2825	1	0	10M	2945	1	49	9.53

CA_41C- Power Level A1

PCC				SCC				conducted power (dBm)
PCC Bandwidth	channel	RB	RB OFFSET	SCC Bandwidth	channel	RB	RB OFFSET	
20M	41490	1	99	20M	41292	1	0	22.45
20M	41490	1	99	15M	41319	1	0	22.61
20M	41490	1	99	10M	41346	1	0	22.68
20M	41490	1	99	5M	41373	1	0	22.78
20M	39750	1	99	5M	39867	1	0	23.01
20M	39750	1	99	20M	39948	1	0	23.03
20M	39750	1	99	15M	39921	1	0	23.01
20M	39750	1	99	10M	39894	1	0	23.03
15M	41515	1	74	15M	41365	1	0	22.88
15M	41515	1	74	10M	41395	1	0	22.94
15M	39725	1	74	10M	39845	1	0	22.88
20M	41490	1	0	20M	41292	1	99	23.02
20M	41490	1	0	15M	41319	1	74	22.97
20M	41490	1	0	10M	41346	1	49	22.92
20M	39750	1	0	5M	39867	1	24	22.76
20M	41490	1	0	5M	41373	1	24	22.96
20M	39750	1	0	20M	39948	1	99	22.42
20M	39750	1	0	15M	39921	1	74	22.56
20M	39750	1	0	10M	39894	1	49	22.63
15M	41515	1	0	15M	41365	1	74	22.24
15M	41515	1	0	10M	41395	1	49	23.19
15M	39725	1	0	10M	39845	1	49	22.93

CA_41C- Power Level B1

PCC				SCC				conducted power (dBm)
PCC Bandw	channel	RB	RB OFFSET	SCC Bandw	channel	RB	RB OFFSET	
20M	41490	1	99	20M	41292	1	0	11.61
20M	41490	1	99	15M	41319	1	0	11.69
20M	41490	1	99	10M	41346	1	0	11.72
20M	41490	1	99	5M	41373	1	0	11.78
20M	39750	1	99	5M	39867	1	0	11.89
20M	39750	1	99	20M	39948	1	0	11.88
20M	39750	1	99	15M	39921	1	0	11.85
20M	39750	1	99	10M	39894	1	0	11.85
15M	41515	1	74	15M	41365	1	0	11.83
15M	41515	1	74	10M	41395	1	0	11.86
15M	39725	1	74	10M	39845	1	0	11.83
20M	41490	1	0	20M	41292	1	99	11.85
20M	41490	1	0	15M	41319	1	74	11.87
20M	41490	1	0	10M	41346	1	49	11.85
20M	39750	1	0	5M	39867	1	24	11.77
20M	41490	1	0	5M	41373	1	24	11.87
20M	39750	1	0	20M	39948	1	99	11.59
20M	39750	1	0	15M	39921	1	74	11.66
20M	39750	1	0	10M	39894	1	49	11.7
15M	41515	1	0	15M	41365	1	74	11.5
15M	41515	1	0	10M	41395	1	49	11.87
15M	39725	1	0	10M	39845	1	49	11.85

CA_41C- Power Level C1

PCC				SCC				conducted power (dBm)
PCC Bandw	channel	RB	RB OFFSET	SCC Bandw	channel	RB	RB OFFSET	
20M	41490	1	99	20M	41292	1	0	8.74
20M	41490	1	99	15M	41319	1	0	8.8
20M	41490	1	99	10M	41346	1	0	8.82
20M	41490	1	99	5M	41373	1	0	8.86
20M	39750	1	99	5M	39867	1	0	8.95
20M	39750	1	99	20M	39948	1	0	8.96
20M	39750	1	99	15M	39921	1	0	8.95
20M	39750	1	99	10M	39894	1	0	8.96
15M	41515	1	74	15M	41365	1	0	8.9
15M	41515	1	74	10M	41395	1	0	8.93
15M	39725	1	74	10M	39845	1	0	8.9
20M	41490	1	0	20M	41292	1	99	8.96
20M	41490	1	0	15M	41319	1	74	8.94
20M	41490	1	0	10M	41346	1	49	8.92
20M	39750	1	0	5M	39867	1	24	8.86
20M	41490	1	0	5M	41373	1	24	8.93
20M	39750	1	0	20M	39948	1	99	8.72
20M	39750	1	0	15M	39921	1	74	8.78
20M	39750	1	0	10M	39894	1	49	8.81
15M	41515	1	0	15M	41365	1	74	8.65
15M	41515	1	0	10M	41395	1	49	9.02
15M	39725	1	0	10M	39845	1	49	8.92

11.4 5G NR Measurement result

Table 11.4-1: The tune up for 5G NR

Band	Sensor Off	Sensor On WWAN only	Sensor On WWAN +WIFI	Sensor On WWAN only (ENDC)	Sensor On WWAN +WIFI (ENDC)
	Power Level A1	Power Level B1	Power Level C1	Power Level D1	Power Level E1
5G NR n7	24	14	12	12	10
5G NR n25	24.5	15.5	13.5	13.5	11.5
5G NR n41	27	12.5	10.5	8.5	8.5
5G NR n66	25	15.5	13.5	13.5	11.5
5G NR n71	25	21	19	19	17
5G NR n77	27.5	12	10	/	/
5G NR n78	27	12	10	10	8

n7 (Power Level A1)

5G-n7								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2567.5	513500	24	23.32
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2535	507000	24	23.35
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2502.5	500500	24	23.28
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2560	512000	24	23.19
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2535	507000	24	23.17
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2510	502000	24	23.15
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	2535	507000	24	23.25
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	2535	507000	23	22.18
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	2535	507000	21.5	20.63
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	2535	507000	19.5	18.81
15	5	CP-OFDM QPSK	Inner_Full	12@6	2535	507000	22.5	21.67
15	5	CP-OFDM 16QAM	Inner_Full	12@6	2535	507000	22	21.23
15	5	CP-OFDM 64QAM	Inner_Full	12@6	2535	507000	20.5	19.82
15	5	CP-OFDM 256QAM	Inner_Full	12@6	2535	507000	17.5	16.73
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2_23	2535	507000	23	22.16
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	2535	507000	23	22.12
15	5	DFT-s-OFDM QPSK	Edge_1RB_Right	1_24	2535	507000	23	22.07
15	5	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	2535	507000	23	22.08
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1_23	2535	507000	24	23.08
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	2535	507000	24	23.12
15	5	DFT-s-OFDM QPSK	Outer_Full	25_0	2535	507000	23	22.19
15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	2535	507000	24	23.02
15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	2535	507000	24	23.19

n7 (Power Level B1)

5G-n7							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2567.5	513500	12.99
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2535	507000	13.06
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2502.5	500500	13.04
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2560	512000	12.94
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2535	507000	12.88
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2510	502000	12.95
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	2535	507000	12.99
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	2535	507000	12.93
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	2535	507000	12.91
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	2535	507000	12.96
15	5	CP-OFDM QPSK	Inner_Full	12@6	2535	507000	12.94
15	5	CP-OFDM 16QAM	Inner_Full	12@6	2535	507000	13.01
15	5	CP-OFDM 64QAM	Inner_Full	12@6	2535	507000	12.94
15	5	CP-OFDM 256QAM	Inner_Full	12@6	2535	507000	12.91
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2_23	2535	507000	12.89
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	2535	507000	12.86
15	5	DFT-s-OFDM QPSK	Edge_1RB_Right	1_24	2535	507000	12.91
15	5	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	2535	507000	12.89
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1_23	2535	507000	12.81
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	2535	507000	12.89
15	5	DFT-s-OFDM QPSK	Outer_Full	25_0	2535	507000	12.95
15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	2565	513000	12.85
15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	2535	507000	12.88
15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	2505	501000	12.87
15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	2562.5	512500	12.84
15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	2535	507000	12.87
15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	2507.5	501500	12.90

n7 (Power Level C1/D1)

5G-n7							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2567.5	513500	10.94
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2535	507000	10.99
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2502.5	500500	10.98
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2560	512000	10.92
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2535	507000	10.89
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2510	502000	10.91
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	2535	507000	10.92
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	2535	507000	10.93
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	2535	507000	10.87
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	2535	507000	10.92
15	5	CP-OFDM QPSK	Inner_Full	12@6	2535	507000	10.86
15	5	CP-OFDM 16QAM	Inner_Full	12@6	2535	507000	10.97
15	5	CP-OFDM 64QAM	Inner_Full	12@6	2535	507000	10.91
15	5	CP-OFDM 256QAM	Inner_Full	12@6	2535	507000	10.88
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2_23	2535	507000	10.87
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	2535	507000	10.86
15	5	DFT-s-OFDM QPSK	Edge_1RB_Right	1_24	2535	507000	10.89
15	5	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	2535	507000	10.91
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1_23	2535	507000	10.82
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	2535	507000	10.88
15	5	DFT-s-OFDM QPSK	Outer_Full	25_0	2535	507000	10.87
15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	2565	513000	10.86
15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	2535	507000	10.87
15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	2505	501000	10.88
15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	2562.5	512500	10.91
15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	2535	507000	10.92
15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	2507.5	501500	10.91

n7 (Power Level E1)

5G-n7							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2567.5	513500	9.22
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2535	507000	9.29
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2502.5	500500	9.23
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2560	512000	9.16
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2535	507000	9.09
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2510	502000	9.12
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	2535	507000	9.06
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	2535	507000	9.01
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	2535	507000	9.03
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	2535	507000	9.02
15	5	CP-OFDM QPSK	Inner_Full	12@6	2535	507000	8.98
15	5	CP-OFDM 16QAM	Inner_Full	12@6	2535	507000	9.07
15	5	CP-OFDM 64QAM	Inner_Full	12@6	2535	507000	9.01
15	5	CP-OFDM 256QAM	Inner_Full	12@6	2535	507000	8.97
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2_23	2535	507000	9.01
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	2535	507000	9.03
15	5	DFT-s-OFDM QPSK	Edge_1RB_Right	1_24	2535	507000	8.99
15	5	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	2535	507000	8.96
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1_23	2535	507000	8.99
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	2535	507000	9.01
15	5	DFT-s-OFDM QPSK	Outer_Full	25_0	2535	507000	9.04
15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	2565	513000	9.03
15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	2535	507000	9.05
15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	2505	501000	9.04
15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	2562.5	512500	8.99
15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	2535	507000	8.98
15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	2507.5	501500	9.01

n25 (Power Level A1)

5G-n25								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1912.5	382500	24.5	23.66
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1882.5	376500	24.5	23.68
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1852.5	370500	24.5	23.67
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1905	381000	24.5	23.62
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1882.5	376500	24.5	23.66
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1860	372000	24.5	23.62
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	1882.5	376500	24.5	23.63
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	1882.5	376500	23.5	22.66
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	1882.5	376500	22	21.08
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	1882.5	376500	20	19.29
15	5	CP-OFDM QPSK	Inner_Full	13@6	1882.5	376500	23	22.12
15	5	CP-OFDM 16QAM	Inner_Full	13@6	1882.5	376500	22.5	21.68
15	5	CP-OFDM 64QAM	Inner_Full	13@6	1882.5	376500	21	20.09
15	5	CP-OFDM 256QAM	Inner_Full	13@6	1882.5	376500	18	17.16
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2@23	1882.5	376500	23.5	22.58
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	1882.5	376500	23.5	22.55
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1@23	1882.5	370500	24.5	23.57
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	1882.5	370500	24.5	23.54
15	5	DFT-s-OFDM QPSK	Outer_Full	25@0	1882.5	370500	23.5	22.63
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	1882.5	376500	24.5	23.44
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	1882.5	376500	24.5	23.56

n25 (Power Level B1)

5G-n25							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1912.5	382500	15.27
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1882.5	376500	15.35
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1852.5	370500	15.28
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1905	381000	15.29
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1882.5	376500	15.26
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1860	372000	15.29
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	1882.5	376500	15.33
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	1882.5	376500	15.31
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	1882.5	376500	15.28
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	1882.5	376500	15.31
15	5	CP-OFDM QPSK	Inner_Full	13@6	1882.5	376500	15.28
15	5	CP-OFDM 16QAM	Inner_Full	13@6	1882.5	376500	15.32
15	5	CP-OFDM 64QAM	Inner_Full	13@6	1882.5	376500	15.31
15	5	CP-OFDM 256QAM	Inner_Full	13@6	1882.5	376500	15.27
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2@23	1882.5	376500	15.21
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	1882.5	376500	15.19
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1@23	1882.5	370500	15.22
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	1882.5	370500	15.21
15	5	DFT-s-OFDM QPSK	Outer_Full	25@0	1882.5	370500	15.22
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	1882.5	376500	15.26
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	1882.5	376500	15.27

n25 (Power Level C1/D1)

5G-n25							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1912.5	382500	13.37
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1882.5	376500	13.39
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1852.5	370500	13.31
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1905	381000	13.32
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1882.5	376500	13.26
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1860	372000	13.31
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	1882.5	376500	13.34
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	1882.5	376500	13.32
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	1882.5	376500	13.34
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	1882.5	376500	13.33
15	5	CP-OFDM QPSK	Inner_Full	13@6	1882.5	376500	13.29
15	5	CP-OFDM 16QAM	Inner_Full	13@6	1882.5	376500	13.35
15	5	CP-OFDM 64QAM	Inner_Full	13@6	1882.5	376500	13.29
15	5	CP-OFDM 256QAM	Inner_Full	13@6	1882.5	376500	13.28
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2@23	1882.5	376500	13.29
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	1882.5	376500	13.27
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1@23	1882.5	370500	13.05
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	1882.5	370500	13.09
15	5	DFT-s-OFDM QPSK	Outer_Full	25@0	1882.5	370500	13.29
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	1882.5	376500	13.29
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	1882.5	376500	13.29

n25 (Power Level E1)

5G-n25							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1912.5	382500	10.96
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1882.5	376500	10.99
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1852.5	370500	10.94
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1905	381000	10.85
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1882.5	376500	10.88
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1860	372000	10.91
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	1882.5	376500	10.96
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	1882.5	376500	10.93
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	1882.5	376500	10.89
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	1882.5	376500	10.93
15	5	CP-OFDM QPSK	Inner_Full	13@6	1882.5	376500	10.88
15	5	CP-OFDM 16QAM	Inner_Full	13@6	1882.5	376500	10.93
15	5	CP-OFDM 64QAM	Inner_Full	13@6	1882.5	376500	10.92
15	5	CP-OFDM 256QAM	Inner_Full	13@6	1882.5	376500	10.86
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2@23	1882.5	376500	10.85
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	1882.5	376500	10.83
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1@23	1882.5	370500	10.89
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	1882.5	370500	10.87
15	5	DFT-s-OFDM QPSK	Outer_Full	25@0	1882.5	370500	10.86
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	1882.5	376500	10.83
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	1882.5	376500	10.84

n66 (Power Level A1)

5G-n66								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1777.5	355500	25	23.93
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1745	349000	25	23.99
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1712.5	342500	25	23.97
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1770	354000	25	23.92
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1745	349000	25	23.87
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1720	344000	25	23.83
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	1745	349000	25	23.93
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	1745	349000	24	22.89
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	1745	349000	22.5	21.16
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	1745	349000	20.5	19.49
15	5	CP-OFDM QPSK	Inner_Full	12@6	1745	349000	23.5	22.36
15	5	CP-OFDM 16QAM	Inner_Full	12@6	1745	349000	23	21.93
15	5	CP-OFDM 64QAM	Inner_Full	12@6	1745	349000	21.5	20.49
15	5	CP-OFDM 256QAM	Inner_Full	12@6	1745	349000	18.5	17.41
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2@23	1745	349000	24	22.78
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	1745	349000	24	22.79
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1@23	1745	349000	25	23.78
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	1745	349000	25	23.82
15	5	DFT-s-OFDM QPSK	Outer_Full	25@0	1745	349000	24	22.83
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	1745	342064	25	23.69
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	1745	347578	25	23.83
15	30	DFT-s-OFDM QPSK	Inner_Full	80@40	1745	346120	25	23.79
15	40	DFT-s-OFDM QPSK	Inner_Full	108@54	1745	345112	25	23.81

n66 (Power Level B1)

5G-n66							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1777.5	355500	15.37
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1745	349000	15.45
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1712.5	342500	15.44
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1770	354000	15.41
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1745	349000	15.35
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1720	344000	15.37
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	1745	349000	15.41
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	1745	349000	15.42
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	1745	349000	15.39
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	1745	349000	15.42
15	5	CP-OFDM QPSK	Inner_Full	12@6	1745	349000	15.38
15	5	CP-OFDM 16QAM	Inner_Full	12@6	1745	349000	15.26
15	5	CP-OFDM 64QAM	Inner_Full	12@6	1745	349000	15.42
15	5	CP-OFDM 256QAM	Inner_Full	12@6	1745	349000	15.35
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2@23	1745	349000	15.39
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	1745	349000	15.36
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1@23	1745	349000	15.37
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	1745	349000	15.33
15	5	DFT-s-OFDM QPSK	Outer_Full	25@0	1745	349000	15.34
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	1745	342064	15.39
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	1745	347578	15.37
15	30	DFT-s-OFDM QPSK	Inner_Full	80@40	1745	346120	15.37
15	40	DFT-s-OFDM QPSK	Inner_Full	108@54	1745	345112	15.32

n66 (Power Level C1/D1)

5G-n66							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1777.5	355500	13.43
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1745	349000	13.49
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1712.5	342500	13.48
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1770	354000	13.47
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1745	349000	13.42
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1720	344000	13.31
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	1745	349000	13.43
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	1745	349000	13.44
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	1745	349000	13.42
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	1745	349000	13.44
15	5	CP-OFDM QPSK	Inner_Full	12@6	1745	349000	13.41
15	5	CP-OFDM 16QAM	Inner_Full	12@6	1745	349000	13.37
15	5	CP-OFDM 64QAM	Inner_Full	12@6	1745	349000	13.36
15	5	CP-OFDM 256QAM	Inner_Full	12@6	1745	349000	13.36
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2@23	1745	349000	13.36
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	1745	349000	13.36
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1@23	1745	349000	13.35
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	1745	349000	13.33
15	5	DFT-s-OFDM QPSK	Outer_Full	25@0	1745	349000	13.33
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	1745	342064	13.37
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	1745	347578	13.36
15	30	DFT-s-OFDM QPSK	Inner_Full	80@40	1745	346120	13.15
15	40	DFT-s-OFDM QPSK	Inner_Full	108@54	1745	345112	13.27

n66 (Power Level E1)

5G-n66							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1777.5	355500	11.25
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1745	349000	11.30
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1712.5	342500	11.27
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1770	354000	11.25
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1745	349000	11.21
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1720	344000	11.22
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	1745	349000	11.29
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	1745	349000	11.27
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	1745	349000	11.24
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	1745	349000	11.26
15	5	CP-OFDM QPSK	Inner_Full	12@6	1745	349000	11.22
15	5	CP-OFDM 16QAM	Inner_Full	12@6	1745	349000	11.28
15	5	CP-OFDM 64QAM	Inner_Full	12@6	1745	349000	11.27
15	5	CP-OFDM 256QAM	Inner_Full	12@6	1745	349000	11.23
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2@23	1745	349000	11.27
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	1745	349000	11.26
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1@23	1745	349000	11.28
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	1745	349000	11.21
15	5	DFT-s-OFDM QPSK	Outer_Full	25@0	1745	349000	11.23
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	1745	342064	11.26
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	1745	347578	11.23
15	30	DFT-s-OFDM QPSK	Inner_Full	80@40	1745	346120	11.24
15	40	DFT-s-OFDM QPSK	Inner_Full	108@54	1745	345112	11.27

n41 (Power Level A1)

5G-n41								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2679.99	535998	27	26.56
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2636.49	527298	27	26.48
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2592.99	518598	27	26.65
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2549.51	509902	27	26.58
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2506.02	501204	27	26.33
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2640	528000	27	26.49
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2616.51	523302	27	26.50
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2592.99	518598	27	26.41
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2569.5	513900	27	26.34
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2546.01	509202	27	26.47
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	2592.99	518598	27	26.63
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	2592.99	518598	26	25.61
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	2592.99	518598	24.5	24.11
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	2592.99	518598	22.5	22.35
30	20	CP-OFDM QPSK	Inner_Full	25@12	2592.99	518598	25.5	25.12
30	20	CP-OFDM 16QAM	Inner_Full	25@12	2592.99	518598	25	24.66
30	20	CP-OFDM 64QAM	Inner_Full	25@12	2592.99	518598	23.5	23.03
30	20	CP-OFDM 256QAM	Inner_Full	25@12	2592.99	518598	20.5	20.17
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@49	2592.99	518598	23.5	22.95
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	2592.99	518598	23.5	22.97
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	2592.99	518598	27	26.41
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	2592.99	518598	27	26.46
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	2592.99	518598	26	25.61
30	30	DFT-s-OFDM QPSK	Inner_Full	36_18	2592.99	518598	27	26.39
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	2592.99	518598	27	26.54
30	50	DFT-s-OFDM QPSK	Inner_Full	64_32	2592.99	518598	27	26.42
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	2592.99	518598	27	26.57
30	70	DFT-s-OFDM QPSK	Inner_Full	90_45	2592.99	518598	27	26.27
30	80	DFT-s-OFDM QPSK	Inner_Full	108_54	2592.99	518598	27	26.48
30	90	DFT-s-OFDM QPSK	Inner_Full	120_60	2592.99	518598	27	26.56

n41 (Power Level B1)

5G-n41							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2679.99	535998	11.16
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2636.49	527298	11.15
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2592.99	518598	11.39
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2549.51	509902	11.26
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2506.02	501204	11.35
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2640	528000	11.07
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2616.51	523302	11.12
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2592.99	518598	11.14
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2569.5	513900	11.22
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2546.01	509202	11.29
30	20	DFT-s-OFDM P/2 BPSK1	Inner_Full	25@12	2592.99	518598	11.22
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	2592.99	518598	11.26
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	2592.99	518598	11.23
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	2592.99	518598	11.28
30	20	CP-OFDM QPSK	Inner_Full	25@12	2592.99	518598	11.19
30	20	CP-OFDM 16QAM	Inner_Full	25@12	2592.99	518598	11.26
30	20	CP-OFDM 64QAM	Inner_Full	25@12	2592.99	518598	11.17
30	20	CP-OFDM 256QAM	Inner_Full	25@12	2592.99	518598	11.21
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@49	2592.99	518598	11.21
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	2592.99	518598	11.20
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	2592.99	518598	10.82
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	2592.99	518598	10.92
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	2592.99	518598	11.22
30	30	DFT-s-OFDM QPSK	Inner_Full	36_18	2592.99	518598	11.25
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	2592.99	518598	11.27
30	50	DFT-s-OFDM QPSK	Inner_Full	64_32	2592.99	518598	11.26
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	2592.99	518598	11.25
30	70	DFT-s-OFDM QPSK	Inner_Full	90_45	2592.99	518598	11.24
30	80	DFT-s-OFDM QPSK	Inner_Full	108_54	2592.99	518598	11.27
30	90	DFT-s-OFDM QPSK	Inner_Full	120_60	2592.99	518598	11.23

n41 (Power Level C1)

5G-n41							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2679.99	535998	9.16
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2636.49	527298	9.25
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2592.99	518598	9.49
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2549.51	509902	9.44
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2506.02	501204	9.45
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2640	528000	9.25
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2616.51	523302	9.29
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2592.99	518598	9.31
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2569.5	513900	9.41
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2546.01	509202	9.47
30	20	DFT-s-OFDM P/2 BPSK1	Inner_Full	25@12	2592.99	518598	9.23
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	2592.99	518598	9.27
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	2592.99	518598	9.22
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	2592.99	518598	9.26
30	20	CP-OFDM QPSK	Inner_Full	25@12	2592.99	518598	9.19
30	20	CP-OFDM 16QAM	Inner_Full	25@12	2592.99	518598	9.27
30	20	CP-OFDM 64QAM	Inner_Full	25@12	2592.99	518598	9.17
30	20	CP-OFDM 256QAM	Inner_Full	25@12	2592.99	518598	9.21
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@49	2592.99	518598	9.23
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	2592.99	518598	9.26
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	2592.99	518598	9.09
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	2592.99	518598	9.14
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	2592.99	518598	9.28
30	30	DFT-s-OFDM QPSK	Inner_Full	36_18	2592.99	518598	9.26
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	2592.99	518598	9.24
30	50	DFT-s-OFDM QPSK	Inner_Full	64_32	2592.99	518598	9.23
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	2592.99	518598	9.21
30	70	DFT-s-OFDM QPSK	Inner_Full	90_45	2592.99	518598	9.27
30	80	DFT-s-OFDM QPSK	Inner_Full	108_54	2592.99	518598	9.23
30	90	DFT-s-OFDM QPSK	Inner_Full	120_60	2592.99	518598	9.20

n41 (Power Level D1/E1)

5G-n41							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2679.99	535998	7.23
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2636.49	527298	7.16
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2592.99	518598	7.51
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2549.51	509902	7.38
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2506.02	501204	7.47
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2640	528000	7.14
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2616.51	523302	7.25
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2592.99	518598	7.29
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2569.5	513900	7.41
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2546.01	509202	7.47
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	2592.99	518598	7.25
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	2592.99	518598	7.28
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	2592.99	518598	7.21
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	2592.99	518598	7.29
30	20	CP-OFDM QPSK	Inner_Full	25@12	2592.99	518598	7.24
30	20	CP-OFDM 16QAM	Inner_Full	25@12	2592.99	518598	7.31
30	20	CP-OFDM 64QAM	Inner_Full	25@12	2592.99	518598	7.18
30	20	CP-OFDM 256QAM	Inner_Full	25@12	2592.99	518598	7.22
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@49	2592.99	518598	7.21
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	2592.99	518598	7.23
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	2592.99	518598	7.05
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	2592.99	518598	7.08
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	2592.99	518598	7.26
30	30	DFT-s-OFDM QPSK	Inner_Full	36_18	2592.99	518598	7.25
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	2592.99	518598	7.23
30	50	DFT-s-OFDM QPSK	Inner_Full	64_32	2592.99	518598	7.26
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	2592.99	518598	7.21
30	70	DFT-s-OFDM QPSK	Inner_Full	90_45	2592.99	518598	7.22
30	80	DFT-s-OFDM QPSK	Inner_Full	108_54	2592.99	518598	7.23
30	90	DFT-s-OFDM QPSK	Inner_Full	120_60	2592.99	518598	7.25

n71 (Power Level A1)

5G-n71								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	695.5	139100	25	23.86
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	680.5	136100	25	23.92
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	665.5	133100	25	23.88
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	688	137600	25	23.87
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	680.5	136100	25	23.86
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	673	134600	25	23.85
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	680.5	136100	25	23.89
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	680.5	136100	24	22.87
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	680.5	136100	22.5	21.33
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	680.5	136100	20.5	19.49
15	5	CP-OFDM QPSK	Inner_Full	13@6	680.5	136100	23.5	22.36
15	5	CP-OFDM 16QAM	Inner_Full	13@6	680.5	136100	23	21.91
15	5	CP-OFDM 64QAM	Inner_Full	13@6	680.5	136100	21.5	20.49
15	5	CP-OFDM 256QAM	Inner_Full	13@6	680.5	136100	18.5	17.41
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2@23	680.5	136100	24	22.86
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	680.5	136100	24	22.78
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1@23	680.5	136100	25	23.82
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	680.5	136100	25	23.78
15	5	DFT-s-OFDM QPSK	Outer_Full	25@0	680.5	136100	24	22.92
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	680.5	136100	25	23.76
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	680.5	136100	25	23.87

n71 (Power Level B1)

5G-n71							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	695.5	139100	20.76
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	680.5	136100	20.82
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	665.5	133100	20.79
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	688	137600	20.73
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	680.5	136100	20.74
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	673	134600	20.80
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	680.5	136100	20.79
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	680.5	136100	20.81
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	680.5	136100	20.78
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	680.5	136100	19.49
15	5	CP-OFDM QPSK	Inner_Full	13@6	680.5	136100	20.81
15	5	CP-OFDM 16QAM	Inner_Full	13@6	680.5	136100	20.80
15	5	CP-OFDM 64QAM	Inner_Full	13@6	680.5	136100	20.49
15	5	CP-OFDM 256QAM	Inner_Full	13@6	680.5	136100	17.42
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2@23	680.5	136100	20.78
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	680.5	136100	20.64
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1@23	680.5	136100	20.62
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	680.5	136100	20.72
15	5	DFT-s-OFDM QPSK	Outer_Full	25@0	680.5	136100	20.77
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	680.5	136100	20.67
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	680.5	136100	20.72

n71 (Power Level C1/D1)

5G-n71							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	695.5	139100	18.79
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	680.5	136100	18.88
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	665.5	133100	18.83
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	688	137600	18.76
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	680.5	136100	18.84
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	673	134600	18.82
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	680.5	136100	18.79
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	680.5	136100	18.77
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	680.5	136100	18.75
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	680.5	136100	18.79
15	5	CP-OFDM QPSK	Inner_Full	13@6	680.5	136100	18.82
15	5	CP-OFDM 16QAM	Inner_Full	13@6	680.5	136100	18.83
15	5	CP-OFDM 64QAM	Inner_Full	13@6	680.5	136100	18.81
15	5	CP-OFDM 256QAM	Inner_Full	13@6	680.5	136100	17.29
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2@23	680.5	136100	18.81
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	680.5	136100	18.78
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1@23	680.5	136100	18.77
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	680.5	136100	18.74
15	5	DFT-s-OFDM QPSK	Outer_Full	25@0	680.5	136100	18.84
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	680.5	136100	18.83
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	680.5	136100	18.79

n71 (Power Level E1)

5G-n71							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	695.5	139100	16.78
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	680.5	136100	16.85
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	665.5	133100	16.79
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	688	137600	16.79
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	680.5	136100	16.81
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	673	134600	16.77
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	680.5	136100	16.72
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	680.5	136100	16.76
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	680.5	136100	16.71
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	680.5	136100	16.73
15	5	CP-OFDM QPSK	Inner_Full	13@6	680.5	136100	16.77
15	5	CP-OFDM 16QAM	Inner_Full	13@6	680.5	136100	16.83
15	5	CP-OFDM 64QAM	Inner_Full	13@6	680.5	136100	16.74
15	5	CP-OFDM 256QAM	Inner_Full	13@6	680.5	136100	16.72
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2@23	680.5	136100	16.73
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	680.5	136100	16.75
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1@23	680.5	136100	16.71
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	680.5	136100	16.77
15	5	DFT-s-OFDM QPSK	Outer_Full	25@0	680.5	136100	16.73
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	680.5	136100	16.72
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	680.5	136100	16.75

n77 (Power Level A1)

5G-n77(3450-3550MHz)								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540	636000	27.5	26.34
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	27.5	26.43
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	27.5	26.32
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3499.98	633332	27.5	26.21
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	27.5	26.05
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3500.01	633334	27.5	26.02
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	26.5	25.96
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	25	24.39
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	23	22.59
30	20	CP-OFDM QPSK	Inner_Full	25@12	3500.01	633334	26	25.38
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	25.5	24.94
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	24	23.35
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	21	20.37
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@49	3500.01	633334	24	23.35
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3500.01	633334	24	23.36
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3500.01	633334	27.5	26.12
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	27.5	26.13
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3500.01	633334	26.5	25.86
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	27.5	26.05
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	27.5	26.08
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	27.5	26.11
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	27.5	26.26
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	27.5	26.14

5G-n77(3700-3980MHz)								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3969.990	664666	27.5	26.34
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3918.000	661200	27.5	26.24
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3866.000	657733	27.5	26.32
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3814.000	654267	27.5	26.24
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3762.000	650800	27.5	26.11
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3710.010	647334	27.5	26.23
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3930.000	662000	27.5	26.14
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3894.000	659600	27.5	26.00
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3858.000	657200	27.5	26.25
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3822.000	654800	27.5	26.03
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3786.000	652400	27.5	26.00
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750.000	650000	27.5	26.07
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3969.990	664666	27.5	26.19
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3969.990	664666	26.5	25.77
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3969.990	664666	25	24.21
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3969.990	664666	23	22.43
30	20	CP-OFDM QPSK	Inner_Full	25@12	3969.990	664666	26	25.21
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3969.990	664666	25.5	24.78
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3969.990	664666	24	23.09
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3969.990	664666	21	20.26
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@49	3969.990	664666	24	23.06
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3969.990	664666	24	23.07
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3969.990	664666	27.5	25.93
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3969.990	664666	27.5	25.86
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3969.990	664666	26.5	25.94
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3960.000	664000	27.5	26.19
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3954.480	663632	27.5	26.20
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3949.980	663332	27.5	26.06
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3939.990	662666	27.5	26.15
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3934.980	662332	27.5	25.90

n77 (Power Level B1)

5G-n77(3450-3550MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540	636000	11.19
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	11.29
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	11.21
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3499.98	633332	10.94
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	10.91
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3500.01	633334	11.19
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	11.26
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	11.27
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	11.28
30	20	CP-OFDM QPSK	Inner_Full	25@12	3500.01	633334	11.22
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	11.26
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	11.13
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	11.17
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@49	3500.01	633334	11.25
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3500.01	633334	11.24
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3500.01	633334	10.89
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	10.93
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3500.01	633334	11.23
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	11.26
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	11.23
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	11.26
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	11.27
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	11.22

5G-n77(3700-3980MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3969.990	664666	11.29
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3918.000	661200	10.95
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3866.000	657733	10.78
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3814.000	654267	10.87
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3762.000	650800	11.04
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3710.010	647334	11.07
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3930.000	662000	10.94
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3894.000	659600	10.75
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3858.000	657200	10.69
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3822.000	654800	10.79
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3786.000	652400	10.89
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750.000	650000	10.96
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3969.990	664666	11.19
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3969.990	664666	11.24
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3969.990	664666	11.25
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3969.990	664666	11.22
30	20	CP-OFDM QPSK	Inner_Full	25@12	3969.990	664666	11.24
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3969.990	664666	11.22
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3969.990	664666	11.14
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3969.990	664666	11.18
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@49	3969.990	664666	11.24
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3969.990	664666	11.23
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3969.990	664666	10.99
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3969.990	664666	10.89
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3969.990	664666	11.24
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3960.000	664000	11.23
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3954.480	663632	11.24
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3949.980	663332	11.25
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3939.990	662666	11.22
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3934.980	662332	11.23

n77 (Power Level C1)

5G-n77(3450-3550MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540	636000	9.28
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	9.39
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	9.18
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3499.98	633332	9.12
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	9.13
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3500.01	633334	9.25
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	9.36
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	9.29
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	9.36
30	20	CP-OFDM QPSK	Inner_Full	25@12	3500.01	633334	9.28
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	9.35
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	9.24
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	9.28
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@49	3500.01	633334	9.25
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3500.01	633334	9.27
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3500.01	633334	9.08
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	8.99
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3500.01	633334	9.26
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	9.24
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	9.25
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	9.26
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	9.23
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	9.26

5G-n77(3700-3980MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3969.990	664666	9.39
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3918.000	661200	9.01
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3866.000	657733	8.75
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3814.000	654267	8.76
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3762.000	650800	9.12
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3710.010	647334	9.17
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3930.000	662000	9.08
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3894.000	659600	8.87
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3858.000	657200	8.77
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3822.000	654800	8.76
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3786.000	652400	8.91
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750.000	650000	9.08
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3969.990	664666	9.28
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3969.990	664666	9.36
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3969.990	664666	9.34
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3969.990	664666	9.31
30	20	CP-OFDM QPSK	Inner_Full	25@12	3969.990	664666	9.30
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3969.990	664666	9.37
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3969.990	664666	9.27
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3969.990	664666	9.33
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@49	3969.990	664666	9.32
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3969.990	664666	9.36
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3969.990	664666	9.08
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3969.990	664666	8.95
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3969.990	664666	9.32
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3960.000	664000	9.36
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3954.480	663632	9.34
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3949.980	663332	9.33
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3939.990	662666	9.32
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3934.980	662332	9.31

n78 (Power Level A1)

5G-n78(3450-3550MHz)								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540	636000	27	26.22
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	27	26.27
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	27	26.23
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3499.98	633332	27	26.06
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	27	26.21
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3500.01	633334	27	26.18
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	26	25.65
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	24.5	24.08
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	22.5	22.27
30	20	CP-OFDM QPSK	Inner_Full	25@12	3500.01	633334	25.5	25.07
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	25	24.64
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	23.5	23.14
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	20.5	20.11
30	20	DFT-s-OFDM QPSK	Edge_1RB_Right	2@49	3500.01	633334	23.5	23.07
30	20	DFT-s-OFDM QPSK	Edge_1RB_Left	2@0	3500.01	633334	23.5	23.09
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	1@50	3500.01	633334	23.5	23.05
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	1@0	3500.01	633334	23.5	23.05
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3500.01	633334	27	25.74
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	27	25.64
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3500.01	633334	26	25.61
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3500.01	633334	27	25.65
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3500.01	633334	27	25.62
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	27	26.03
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	27	25.69
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	27	25.99
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	27	25.77
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	27	26.10

5G-n78(3700-3800MHz)								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3795	653000	27	26.18
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3750	650000	27	26.36
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3705	647000	27	26.19
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750	650000	27	26.26
30	10	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	3750	650000	27	26.25
30	10	DFT-s-OFDM 16QAM	Inner_Full	12@6	3750	650000	26	25.63
30	10	DFT-s-OFDM 64QAM	Inner_Full	12@6	3750	650000	24.5	24.11
30	10	DFT-s-OFDM 256QAM	Inner_Full	12@6	3750	650000	22.5	22.27
30	10	CP-OFDM QPSK	Inner_Full	12@6	3750	650000	25.5	25.13
30	10	CP-OFDM 16QAM	Inner_Full	12@6	3750	650000	25	24.75
30	10	CP-OFDM 64QAM	Inner_Full	12@6	3750	650000	23.5	23.14
30	10	CP-OFDM 256QAM	Inner_Full	12@6	3750	650000	20.5	20.18
30	10	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	3750	650000	23.5	22.94
30	10	DFT-s-OFDM QPSK	Edge_1RB_Right	1@23	3750	650000	23.5	22.98
30	10	DFT-s-OFDM QPSK	Edge_Full_Right	2@22	3750	650000	23.5	23.03
30	10	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3750	650000	23.5	23.07
30	10	DFT-s-OFDM QPSK	Inner_1RB_Right	1@22	3750	650000	27	26.27
30	10	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3750	650000	27	26.25
30	10	DFT-s-OFDM QPSK	Outer_Full	24@0	3750	650000	26	25.63
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3750	650000	27	26.28
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3750	650000	27	25.65
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3750	650000	27	25.91
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3750	650000	27	26.20
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3750	650000	27	26.26
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3750	650000	27	25.85
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3750	650000	27	25.86

n78 (Power Level B1)

5G-n78(3450-3550MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540	636000	10.92
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	11.15
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	11.09
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3499.98	633332	10.88
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	10.88
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3500.01	633334	10.86
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	11.09
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	11.05
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	11.01
30	20	CP-OFDM QPSK	Inner_Full	25@12	3500.01	633334	10.94
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	11.02
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	10.83
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	10.88
30	20	DFT-s-OFDM QPSK	Edge_1RB_Right	2@49	3500.01	633334	10.89
30	20	DFT-s-OFDM QPSK	Edge_1RB_Left	2@0	3500.01	633334	10.87
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	1@50	3500.01	633334	10.86
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	1@0	3500.01	633334	10.85
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3500.01	633334	10.87
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	10.95
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3500.01	633334	10.87
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3500.01	633334	10.83
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3500.01	633334	10.84
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	10.86
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	10.88
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	10.87
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	10.89
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	10.87

5G-n78(3700-3800MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3795	653000	10.83
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3750	650000	10.87
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3705	647000	10.82
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750	650000	10.66
30	10	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	3750	650000	10.45
30	10	DFT-s-OFDM 16QAM	Inner_Full	12@6	3750	650000	10.69
30	10	DFT-s-OFDM 64QAM	Inner_Full	12@6	3750	650000	10.63
30	10	DFT-s-OFDM 256QAM	Inner_Full	12@6	3750	650000	10.67
30	10	CP-OFDM QPSK	Inner_Full	12@6	3750	650000	10.69
30	10	CP-OFDM 16QAM	Inner_Full	12@6	3750	650000	10.67
30	10	CP-OFDM 64QAM	Inner_Full	12@6	3750	650000	10.74
30	10	CP-OFDM 256QAM	Inner_Full	12@6	3750	650000	10.69
30	10	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	3750	650000	10.75
30	10	DFT-s-OFDM QPSK	Edge_1RB_Right	1@23	3750	650000	10.74
30	10	DFT-s-OFDM QPSK	Edge_Full_Right	2@22	3750	650000	10.72
30	10	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3750	650000	10.73
30	10	DFT-s-OFDM QPSK	Inner_1RB_Right	1@22	3750	650000	10.44
30	10	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3750	650000	10.47
30	10	DFT-s-OFDM QPSK	Outer_Full	24@0	3750	650000	10.72
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3750	650000	10.74
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3750	650000	10.75
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3750	650000	10.71
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3750	650000	10.76
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3750	650000	10.74
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3750	650000	10.76
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3750	650000	10.79

n78 (Power Level C1/D1)

5G-n78(3450-3550MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540	636000	8.64
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	9.50
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	9.44
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3499.98	633332	9.49
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	9.48
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3500.01	633334	9.36
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	9.45
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	9.41
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	9.42
30	20	CP-OFDM QPSK	Inner_Full	25@12	3500.01	633334	9.38
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	9.45
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	9.33
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	9.38
30	20	DFT-s-OFDM QPSK	Edge_1RB_Right	2@49	3500.01	633334	9.36
30	20	DFT-s-OFDM QPSK	Edge_1RB_Left	2@0	3500.01	633334	9.37
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	1@50	3500.01	633334	9.38
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	1@0	3500.01	633334	9.35
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3500.01	633334	9.07
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	9.13
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3500.01	633334	9.37
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3500.01	633334	9.36
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3500.01	633334	9.37
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	9.35
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	9.39
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	9.33
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	9.36
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	9.34

5G-n78(3700-3800MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3795	653000	8.99
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3750	650000	9.37
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3705	647000	9.32
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750	650000	9.25
30	10	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	3750	650000	9.02
30	10	DFT-s-OFDM 16QAM	Inner_Full	12@6	3750	650000	9.15
30	10	DFT-s-OFDM 64QAM	Inner_Full	12@6	3750	650000	9.12
30	10	DFT-s-OFDM 256QAM	Inner_Full	12@6	3750	650000	9.19
30	10	CP-OFDM QPSK	Inner_Full	12@6	3750	650000	9.17
30	10	CP-OFDM 16QAM	Inner_Full	12@6	3750	650000	9.22
30	10	CP-OFDM 64QAM	Inner_Full	12@6	3750	650000	9.19
30	10	CP-OFDM 256QAM	Inner_Full	12@6	3750	650000	9.16
30	10	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	3750	650000	9.18
30	10	DFT-s-OFDM QPSK	Edge_1RB_Right	1@23	3750	650000	9.16
30	10	DFT-s-OFDM QPSK	Edge_Full_Right	2@22	3750	650000	9.14
30	10	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3750	650000	9.15
30	10	DFT-s-OFDM QPSK	Inner_1RB_Right	1@22	3750	650000	8.96
30	10	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3750	650000	8.98
30	10	DFT-s-OFDM QPSK	Outer_Full	24@0	3750	650000	9.17
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3750	650000	9.17
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3750	650000	9.17
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3750	650000	9.19
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3750	650000	9.18
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3750	650000	9.14
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3750	650000	9.15
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3750	650000	9.20

n78 (Power Level E1)

5G-n78(3450-3550MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540	636000	6.60
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	7.49
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	7.41
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3499.98	633332	7.39
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	7.43
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3500.01	633334	7.32
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	7.44
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	7.37
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	7.45
30	20	CP-OFDM QPSK	Inner_Full	25@12	3500.01	633334	7.34
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	7.41
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	7.27
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	7.31
30	20	DFT-s-OFDM QPSK	Edge_1RB_Right	2@49	3500.01	633334	7.34
30	20	DFT-s-OFDM QPSK	Edge_1RB_Left	2@0	3500.01	633334	7.33
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	1@50	3500.01	633334	7.35
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	1@0	3500.01	633334	7.39
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3500.01	633334	7.04
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	7.09
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3500.01	633334	7.35
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3500.01	633334	7.35
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3500.01	633334	7.34
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	7.33
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	7.32
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	7.39
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	7.38
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	7.37

5G-n78(3700-3800MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3795	653000	7.36
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3750	650000	7.59
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3705	647000	7.54
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750	650000	7.57
30	10	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	3750	650000	7.41
30	10	DFT-s-OFDM 16QAM	Inner_Full	12@6	3750	650000	7.53
30	10	DFT-s-OFDM 64QAM	Inner_Full	12@6	3750	650000	7.48
30	10	DFT-s-OFDM 256QAM	Inner_Full	12@6	3750	650000	7.53
30	10	CP-OFDM QPSK	Inner_Full	12@6	3750	650000	7.54
30	10	CP-OFDM 16QAM	Inner_Full	12@6	3750	650000	7.56
30	10	CP-OFDM 64QAM	Inner_Full	12@6	3750	650000	7.58
30	10	CP-OFDM 256QAM	Inner_Full	12@6	3750	650000	7.53
30	10	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	3750	650000	7.54
30	10	DFT-s-OFDM QPSK	Edge_1RB_Right	1@23	3750	650000	7.52
30	10	DFT-s-OFDM QPSK	Edge_Full_Right	2@22	3750	650000	7.54
30	10	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3750	650000	7.53
30	10	DFT-s-OFDM QPSK	Inner_1RB_Right	1@22	3750	650000	7.57
30	10	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3750	650000	7.54
30	10	DFT-s-OFDM QPSK	Outer_Full	24@0	3750	650000	7.51
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3750	650000	7.55
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3750	650000	7.52
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3750	650000	7.58
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3750	650000	7.57
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3750	650000	7.56
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3750	650000	7.58
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3750	650000	7.56

11.5 Wi-Fi and BT Measurement result

The maximum output power of BT antenna is 10.4dBm.

The maximum tune up of BT antenna is 11.5dBm.

The average conducted power for Wi-Fi 2.4G is as following-Power Level A1

802.11b		
Channel\data rate	1Mbps	Tune up
11(2462MHz)	20.65	22.00
6(2437(MHz)	20.39	22.00
1(2412MHz)	20.52	22.00
802.11g		
Channel\data rate	6Mbps	Tune up
11(2462MHz)	18.09	19.50
6(2437(MHz)	17.68	19.50
1(2412MHz)	18.01	19.50
802.11n-20MHz		
Channel\data rate	MCS0	Tune up
11(2462MHz)	18.15	19.00
6(2437(MHz)	17.53	19.50
1(2412MHz)	17.94	19.00
802.11n-40MHz		
Channel\data rate	MCS0	Tune up
9(2452MHz)	15.04	17.00
6(2437MHz)	14.95	17.00
3(2422MHz)	13.68	15.00

The average conducted power for Wi-Fi 2.4G is as following-Power Level B1

802.11b		
Channel\data rate	1Mbps	Tune up
11(2462MHz)	12.21	13.50
6(2437(MHz)	12.17	13.50
1(2412MHz)	12.19	13.50
802.11g		
Channel\data rate	6Mbps	Tune up
11(2462MHz)	11.09	12.50
6(2437(MHz)	11.16	12.50
1(2412MHz)	11.25	12.50
802.11n-20MHz		
Channel\data rate	MCS0	Tune up
11(2462MHz)	10.69	12.00
6(2437(MHz)	11.11	12.50
1(2412MHz)	10.90	12.00
802.11n-40MHz		
Channel\data rate	MCS0	Tune up
9(2452MHz)	7.94	8.00
6(2437MHz)	9.33	10.00
3(2422MHz)	9.58	10.00

The average conducted power for Wi-Fi 2.4G is as following-Power Level C1

802.11b		
Channel\data rate	1Mbps	Tune up
11(2462MHz)	10.55	11.50
6(2437(MHz)	10.52	11.50
1(2412MHz)	10.48	11.50
802.11g		
Channel\data rate	6Mbps	Tune up
11(2462MHz)	9.70	10.50
6(2437(MHz)	9.88	10.50
1(2412MHz)	9.64	10.50
802.11n-20MHz		
Channel\data rate	MCS0	Tune up
11(2462MHz)	9.22	10.00
6(2437(MHz)	9.67	10.50
1(2412MHz)	9.29	10.00
802.11n-40MHz		
Channel\data rate	MCS0	Tune up
9(2452MHz)	5.97	6.00
6(2437MHz)	7.64	8.00
3(2422MHz)	7.78	8.00

The tune up power for Wi-Fi 5G is as following:

Power rating	Channel	sensor off	sensor on	Sensor on + WWAN	Tolerance
802.11a-6M	36-48	19	11.5	9.5	+1dBm/ -1dBm
	52-64	19	11.5	9.5	+1dBm/ -1dBm
	100-136	19	11.5	9.5	+1dBm/ -1dBm
	140	19	11.5	9.5	+1dBm/ -1dBm
	144-165	19	11.5	9.5	+1dBm/ -1dBm
802.11n-HT20-MCS0	36-48	19	11.5	9.5	+1dBm/ -1dBm
	52-64	19	11.5	9.5	+1dBm/ -1dBm
	100	18	11	9.5	+1dBm/ -1dBm
	104-136	19	11.5	9.5	+1dBm/ -1dBm
	140	19	11.5	9.5	+1dBm/ -1dBm
	144-165	19	11.5	9.5	+1dBm/ -1dBm
802.11n-HT40-MCS0	38	16	9	7	+1dBm/ -1dBm
	46-62	16	9	7	+0.5dBm/ -1.5dBm
	102	16	9	7	+1dBm/ -1dBm
	110-159	18	11	9	+1dBm/ -1dBm
802.11ac-VHT20-MCS0	36-48	18	11	9	+1dBm/ -1dBm
	52-64	18	11	9	+1dBm/ -1dBm
	100-144	18	11	9	+1dBm/ -1dBm
	149-165	18	11	9	+1dBm/ -1dBm

802.11ac-VHT40-MCS0	38	16	9	7	+1dBm/ -1dBm
	46-62	16	9	7	+1dBm/ -1dBm
	102-142	18	11	9	+1dBm/ -1dBm
	151-159	18	11	9	+1dBm/ -1dBm
802.11ac-VHT80M-MCS0	42	15	8	6	+1dBm/ -1dBm
	58	15	8	6	+1dBm/ -1dBm
	106	17	10	8	+1dBm/ -1dBm
	122-138	17	10	8	+0.5dBm/ -1.5dBm
	155	17	10	8	+1dBm/ -1dBm

The average conducted power for Wi-Fi 5G is as following - Power Level A1

802.11a(dBm)	
Channel\data rate	6Mbps
36(5180 MHz)	18.18
40(5200 MHz)	18.08
44(5220 MHz)	18.09
48(5240 MHz)	18.24
52(5260 MHz)	18.44
56(5280 MHz)	18.66
60(5300 MHz)	18.74
64(5320 MHz)	18.67
100(5500 MHz)	18.79
104(5520 MHz)	18.57
108(5540 MHz)	18.54
112(5560 MHz)	18.73
116(5580 MHz)	18.21
120(5600 MHz)	18.44
124(5620 MHz)	18.63
128(5640 MHz)	18.56
132(5660 MHz)	19.29
136(5680 MHz)	18.96
140(5700 MHz)	19.05
144(5720 MHz)	18.94
149(5745 MHz)	19.06
153(5765 MHz)	19.25
157(5785 MHz)	19.26
161(5805 MHz)	19.02
165(5825 MHz)	19.41
Tune up	20.00

The average conducted power for Wi-Fi 5G is as following - Power Level B1

802.11a(dBm)	
Channel\data rate	6Mbps
36(5180 MHz)	10.77
40(5200 MHz)	10.66
44(5220 MHz)	10.75
48(5240 MHz)	10.89
52(5260 MHz)	11.07
56(5280 MHz)	11.25
60(5300 MHz)	11.39
64(5320 MHz)	11.32
100(5500 MHz)	11.03
104(5520 MHz)	10.84
108(5540 MHz)	10.75
112(5560 MHz)	10.95
116(5580 MHz)	10.72
120(5600 MHz)	10.89
124(5620 MHz)	11.13
128(5640 MHz)	10.99
132(5660 MHz)	11.46
136(5680 MHz)	11.35
140(5700 MHz)	11.19
144(5720 MHz)	11.19
149(5745 MHz)	11.26
153(5765 MHz)	11.46
157(5785 MHz)	11.55
161(5805 MHz)	11.29
165(5825 MHz)	11.58
Tune up	12.50

The average conducted power for Wi-Fi 5G is as following - Power Level C1

802.11a(dBm)	
Channel\data rate	6Mbps
36(5180 MHz)	8.95
40(5200 MHz)	8.83
44(5220 MHz)	8.78
48(5240 MHz)	8.96
52(5260 MHz)	9.18
56(5280 MHz)	9.43
60(5300 MHz)	9.49
64(5320 MHz)	9.35
100(5500 MHz)	9.17
104(5520 MHz)	8.92
108(5540 MHz)	8.87
112(5560 MHz)	8.97
116(5580 MHz)	8.78
120(5600 MHz)	9.07
124(5620 MHz)	9.22
128(5640 MHz)	9.17
132(5660 MHz)	9.43
136(5680 MHz)	9.26
140(5700 MHz)	9.25
144(5720 MHz)	9.28
149(5745 MHz)	9.34
153(5765 MHz)	9.55
157(5785 MHz)	9.54
161(5805 MHz)	9.36
165(5825 MHz)	9.62
Tune up	10.50

ANT_No		TRX	DRX	PRX MIMO	DRX MIMO
A	ANT0	GSM: GSM850/900 WCDMA: B5/8 LTE: B5/7/8/12/13/17/20/26/28/71 NR: n7/28/71	n77/78	LTE: B38/B41 NR: n38/41	
B	ANT1	GSM: 1800/1900 WCDMA: B1/2/4 LTE: B1/2/25/3/4/66/39 NR: n1/3/25/66			
C	ANT2		LTE: B38/40/B41 NR: n38/41	LTE B1/2/3/4/25/66/7 NR:n1/3/7/25/66/77/78	
D	ANT3	LTE : B38/B40/B41 NR: n38/41	GSM:GSM850/9001800/1900 WCDMA: B1/2/4/5/8 LTE: B1/2/3/4/5/7/8/12/13/17/20/25/26/28/6 6/71/39 NR: n1/3/7/25/28/66/71		
E	ANT4	n77/78			
F	ANT5	GPS/WIFI(IEEE 802.11 a/b/g/n/ac)			
G	ANT6				LTE: B1/2/3/4/7/25/66/38/41 NR: n1/3/7/25/66/38/41/77/78

Picture 12.1 Antenna Locations

12.3 SAR Measurement Positions

According to the KDB941225 D06 Hot Spot SAR, the edges with less than 2.5 cm distance to the antennas need to be tested for SAR.

SAR measurement positions						
Mode	Front	Rear	Left edge	Right edge	Top edge	Bottom edge
WWAN-ANT0	No	Yes	No	Yes	No	Yes
WWAN-ANT1	No	Yes	No	Yes	No	No
WWAN-ANT3	No	Yes	No	Yes	No	No
WWAN-ANT4	No	Yes	No	Yes	No	No
WIFI-ANT5	No	Yes	No	No	Yes	No

13 Evaluation of Simultaneous

The sum of reported SAR values for 2/3/4G +WiFi

Reported SAR 1g (W/kg)																						
State		1														2	3	4	1+2	1+3	1+4	
Sensor		G850 ANT0	G1900 ANT1	WB2 ANT1	WB4 ANT1	WB5 ANT0	LTE B2 ANT1	LTE B7 ANT0	LTE B12 ANT0	LTE B13 ANT0	LTE B25 ANT1	LTE B26 ANT0	LTE B41 PC3 ANT3	LTE B41 PC2 ANT3	LTE B66 ANT1	LTE B71 ANT0	WiFi 2.4G	WiFi 5G				BT
Top	15mm																0.48	0.21	0.00	0.48	0.21	0.00
Rear	15mm	0.65	0.54	0.83	0.81	0.35	0.47	0.39	0.18	0.38	0.68	0.42	0.35	0.46	0.82	0.29	0.47	0.37	0.00	1.30	1.20	0.83
Right	15mm	0.28	0.47	0.68	0.52	0.18	0.49	0.53	0.08	0.20	0.58	0.25	0.57	0.78	0.57	0.11	0.19	0.42	0.00	0.97	1.20	0.78
Bottom	15mm	0.85				0.41		0.15	0.20	0.46		0.45				0.21				0.85	0.85	0.85

Reported SAR 1g (W/kg)																						
State		1														2	3	4	1+2	1+3+4	1+4	
Body		G850 ANT0	G1900 ANT1	WB2 ANT1	WB4 ANT1	WB5 ANT0	LTE B2 ANT1	LTE B7 ANT0	LTE B12 ANT0	LTE B13 ANT0	LTE B25 ANT1	LTE B26 ANT0	LTE B41 PC3 ANT3	LTE B41 PC2 ANT3	LTE B66 ANT1	LTE B71 ANT0	WiFi 2.4G	WiFi 5G				BT
Top	0mm																0.58	0.12	0.37	0.58	0.12	0.37
Rear	0mm	0.68	0.81		0.88	0.48	0.87	0.50	0.39	0.58	0.97	0.29	0.43	0.51	0.94	0.75	0.77	0.49	0.45	1.74	1.46	1.42
Right	0mm	0.26	0.28	0.41	0.17	0.22	0.31	0.20	0.25	0.26	0.37	0.10	0.17	0.17	0.17	0.45	0.25	0.63	0.13	0.70	1.08	0.58
Bottom	0mm	0.80				0.51		0.27	0.71	0.84		0.47				0.79				0.84	0.84	0.84

The sum of reported SAR values for 5G NR +WiFi

Reported SAR 1g (W/kg)														
State		1							2	3	4	1+2	1+3	1+4
Sensor		N7 ANT0	N25 ANT1	N41 ANT3	N66 ANT1	N71 ANT0	N77 ANT4	N78 ANT4	WiFi 2.4G	WiFi 5G	BT			
Top	15mm								0.48	0.21	0.00	0.48	0.21	0.00
Rear	15mm	0.50	0.60	0.03	0.77	0.13	0.02	0.02	0.47	0.37	0.00	1.24	1.14	0.77
Right	15mm	0.79	0.48	0.04	0.44	0.07	0.05	0.04	0.19	0.42	0.00	0.98	1.21	0.79
Bottom	15mm	0.16				0.15						0.16	0.16	0.16

Reported SAR 1g (W/kg)														
State		1							2	3	4	1+2	1+3	1+4
Body		N7 ANT0	N25 ANT1	N41 ANT3	N66 ANT1	N71 ANT0	N77 ANT4	N78 ANT4	WiFi 2.4G	WiFi 5G	BT			
Top	0mm								0.58	0.12	0.37	0.58	0.12	0.37
Rear	0mm	0.41	0.75	0.81	0.65	0.52	0.73	0.66	0.77	0.49	0.45	1.58	1.30	1.26
Right	0mm	0.13	0.31	0.38	0.15	0.31	0.82	0.71	0.25	0.63	0.13	1.07	1.45	0.95
Bottom	0mm	0.25				0.69						0.69	0.69	0.69

The sum of reported SAR values for ENDC (N25 ANT1 relative combination) + WiFi

Reported SAR 1g (W/kg)										
State		1	2	3	4	5	6	6+3	6+4	6+5
Sensor		N25 ANT1	LTE B66 ANT3	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2			
Top	15mm			0.48	0.21	0.00	0.00	0.48	0.21	0.00
Rear	15mm	0.60	0.57	0.47	0.37	0.00	1.17	1.64	1.54	1.17
Right	15mm	0.48	0.26	0.19	0.42	0.00	0.74	0.93	1.16	0.74

Reported SAR 1g (W/kg)										
State		1	2	3	4	5	6	6+3	6+4	6+5
Body		N25 ANT1	LTE B66 ANT3	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2			
Top	0mm			0.58	0.12	0.37	0.00	0.58	0.12	0.37
Rear	0mm	0.49	0.49	0.77	0.49	0.45	0.98	1.75	1.47	1.43
Right	0mm	0.20	0.18	0.25	0.63	0.13	0.38	0.63	1.01	0.51

The sum of reported SAR values for ENDC (N41 ANT3 relative combination) + WiFi

Reported SAR 1g (W/kg)											
State		1	2		3	4	5	6	6+3	6+4	6+5
Sensor		N41 ANT3	LTE B2 ANT1	LTE B66 ANT1	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2			
Top	15mm				0.48	0.21	0.00	0.00	0.48	0.21	0.00
Rear	15mm	0.03	0.47	0.55	0.47	0.37	0.00	0.58	1.05	0.95	0.58
Right	15mm	0.04	0.49	0.10	0.19	0.42	0.00	0.53	0.72	0.95	0.53
State		1	2		3	4	5	6	6+3	6+4	6+5
Body		N41 ANT3	LTE B2 ANT1	LTE B66 ANT1	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2			
Top	0mm				0.58	0.12	0.37	0.00	0.58	0.12	0.37
Rear	0mm	0.46	0.56	0.55	0.77	0.49	0.45	1.02	1.79	1.51	1.47
Right	0mm	0.26	0.21	0.10	0.25	0.63	0.13	0.47	0.72	1.10	0.60

The sum of reported SAR values for ENDC (N66 ANT1 relative combination) + WiFi

Reported SAR 1g (W/kg)										
State		1	2	3	4	5	6	6+3	6+4	6+5
Sensor		N66 ANT1	LTE B2 ANT3	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2			
Top	15mm			0.48	0.21	0.00	0.00	0.48	0.21	0.00
Rear	15mm	0.77	0.78	0.47	0.37	0.00	1.55	2.02	1.92	1.55
Right	15mm	0.44	0.75	0.19	0.42	0.00	1.19	1.38	1.61	1.19
State		1	2	3	4	5	6	6+3	6+4	6+5
Body		N66 ANT1	LTE B2 ANT3	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2			
Top	0mm			0.58	0.12	0.37	0.00	0.58	0.12	0.37
Rear	0mm	0.65	0.52	0.77	0.49	0.45	1.17	1.94	1.66	1.62
Right	0mm	0.15	0.41	0.25	0.63	0.13	0.56	0.81	1.19	0.69

The sum of reported SAR values for ENDC (N71 ANT0 relative combination) + WiFi

Reported SAR 1g (W/kg)											
State		1	2		3	4	5	6	6+3	6+4	6+5
Sensor		N71 ANT0	LTE B2 ANT3	LTE B66 ANT3	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2			
Top	15mm				0.48	0.21	0.00	0.00	0.48	0.21	0.00
Rear	15mm	0.13	0.78	0.57	0.47	0.37	0.00	0.91	1.38	1.28	0.91
Right	15mm	0.07	0.75	0.26	0.19	0.42	0.00	0.82	1.01	1.24	0.82
Bottom	15mm	0.15						0.15	0.15	0.15	0.15
State		1	2		3	4	5	6	6+3	6+4	6+5
Body		N71 ANT0	LTE B2 ANT3	LTE B66 ANT3	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2			
Top	0mm				0.58	0.12	0.37	0.00	0.58	0.12	0.37
Rear	0mm	0.26	0.52	0.49	0.77	0.49	0.45	0.78	1.55	1.27	1.23
Right	0mm	0.16	0.41	0.18	0.25	0.63	0.13	0.57	0.82	1.20	0.70
Bottom	0mm	0.43						0.43	0.43	0.43	0.43

The sum of reported SAR values for ENDC (N78 ANT4 relative combination) + WiFi

Reported SAR 1g (W/kg)										
State		1	2	3	4	5	6	5+3	5+4	5+4
Sensor		N78 ANT4	LTE B7 ANT0	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2			
Top	15mm			0.48	0.21	0.00	0.00	0.48	0.48	0.21
Rear	15mm	0.02	0.39	0.47	0.37	0.00	0.41	0.88	0.47	0.78
Right	15mm	0.04	0.53	0.19	0.42	0.00	0.57	0.76	0.19	0.99
Bottom	15mm		0.15				0.15	0.15	0.00	0.15
State		1	2	3	4	5	6	5+3	5+4	5+4
Body		N78 ANT4	LTE B7 ANT0	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2			
Top	0mm			0.58	0.12	0.37	0.00	0.58	0.95	0.12
Rear	0mm	0.30	0.30	0.77	0.49	0.45	0.60	1.37	1.22	1.09
Right	0mm	0.46	0.10	0.25	0.63	0.13	0.56	0.81	0.38	1.19
Bottom	0mm		0.14				0.14	0.14	0.00	0.14

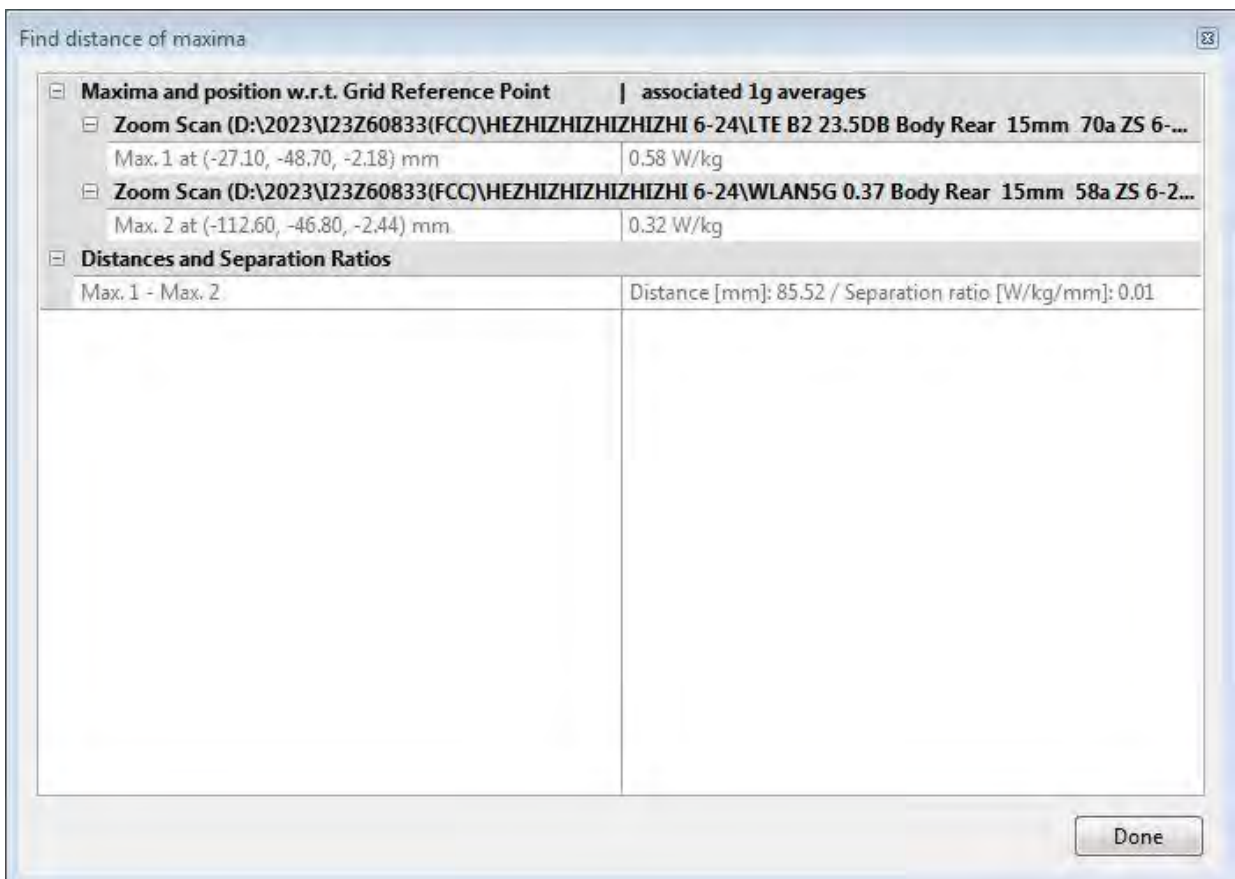
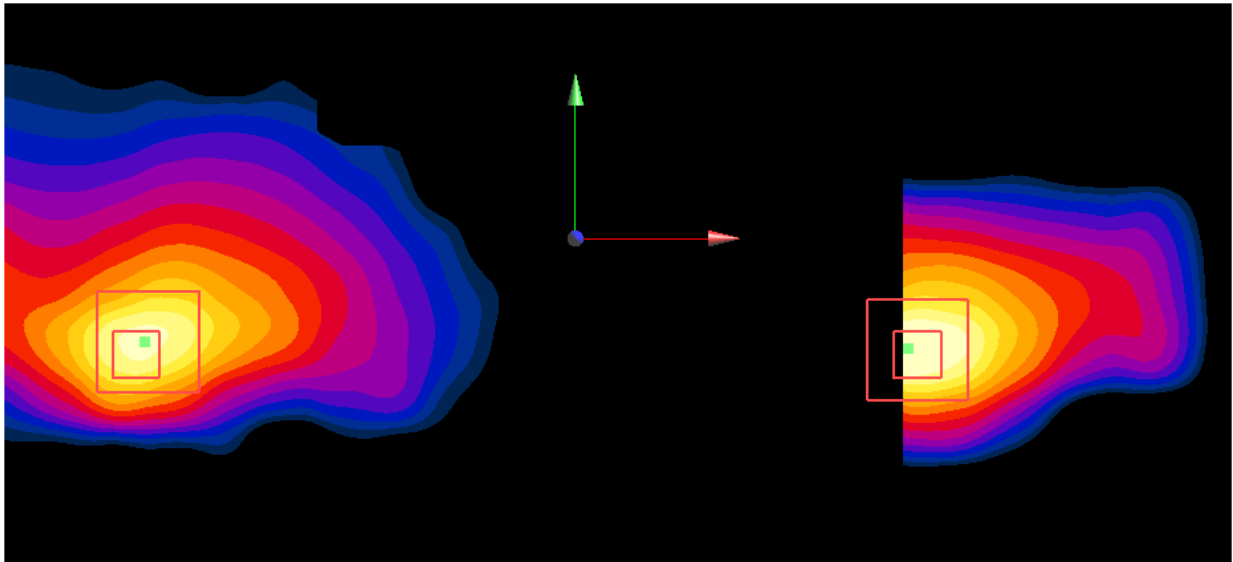
SPLSR for WWAN+WIFI						
Position	Band	Main antenna	WiFi-2.4G	Sum	Distance (mm)	Ratio
Rear 0mm	WB2-ANT1	1.04	0.77	1.81	157.57	0.015
Rear 0mm	LTE B25-ANT1	0.97	0.77	1.74	163.76	0.014
Rear 0mm	LTE B66 ANT1	0.94	0.77	1.71	157.01	0.014

SPLSR for n25(ANT1) related ENDC+WIFI						
Position	ENDC	n25 ANT1	LTE B66 ANT3	Sum	Distance (mm)	Ratio
Rear 15mm	66A_n25A	0.60	0.57	1.17	68.75	0.018
Position	Band	Main antenna	WiFi-2.4G	Sum	Distance (mm)	Ratio
Rear 15mm	n25-ANT1	1.38	0.47	1.85	157.04	0.016
Rear 15mm	LTE B66-ANT3	1.17	0.47	1.64	88.58	0.024
Rear 0mm	n25-ANT1	1.01	0.77	1.78	158.07	0.015
Rear 0mm	LTE B66-ANT3	0.98	0.77	1.75	89.63	0.026
Position	band	Main antenna	WiFi-5G	Sum	Distance (mm)	Ratio
Rear 15mm	n25-ANT1	1.28	0.37	1.65	157.89	0.013
Rear 15mm	LTE B66-ANT3	1.07	0.37	1.44	89.18	0.019

SPLSR for n41(ANT3) related ENDC+WIFI						
Position	band	Main antenna	WiFi-2.4G	Sum	Distance (mm)	Ratio
Rear 0mm	n41-ANT3	1.02	0.77	1.79	87.75	0.027
Rear 0mm	LTE B2-ANT1	1.02	0.77	1.79	156.78	0.015

SPLSR for n66(ANT1) related ENDC+WIFI						
Position	ENDC	N66 ANT1	LTE B2 ANT3	Sum	Distance (mm)	Ratio
Rear 15mm	2A_n66A	0.77	0.78	1.55	83.97	0.023
Rear 0mm	2A_n66A	0.65	0.48	1.13	78.95	0.015
Position	band	Main antenna	WiFi-2.4G	Sum	Distance (mm)	Ratio
Rear 15mm	n66-ANT1	1.55	0.47	2.02	165.18	0.017
Rear 15mm	LTE B2-ANT3	1.55	0.47	2.02	85.52	0.034
Rear 0mm	n66-ANT1	1.17	0.77	1.94	162.06	0.017
Rear 0mm	LTE B2-ANT3	1.17	0.77	1.94	87.86	0.031
Position	band	Main antenna	WiFi-5G	Sum	Distance (mm)	Ratio
Rear 15mm	n66-ANT1	1.45	0.37	1.82	166.25	0.015
Rear 15mm	LTE B2-ANT3	1.45	0.37	1.82	85.52	0.029

According to the KDB 447498 D01, when the sum of SAR is larger than the limit, SAR test exclusion is determined by the SAR to peak location separation ratio. The ratio is determined by $(SAR1 + SAR2)^{1.5}/R_i$, rounded to two decimal digits, and must be ≤ 0.04 for all antenna pairs in the configuration to qualify for 1-g SAR test exclusion.



Picture 13.1 Distance evaluation for LTE B2-ANT3 and WiFi 2.4G Rear 15mm

14 SAR Test Result

It is determined by user manual for the distance between the EUT and the phantom bottom.

The distance is 10 mm and just applied to the condition of body worn accessory.

It is performed for all SAR measurements with area scan based 1-g SAR estimation (Fast SAR). A zoom scan measurement is added when the estimated 1-g SAR is the highest measured SAR in each exposure configuration, wireless mode and frequency band combination or more than 1.2W/kg.

The calculated SAR is obtained by the following formula:

$$\text{Reported SAR} = \text{Measured SAR} \times 10^{(P_{\text{Target}} - P_{\text{Measured}})/10}$$

Where P_{Target} is the power of manufacturing upper limit;

P_{Measured} is the measured power in chapter 11.

Table 14.1: Duty Cycle

Mode	Duty Cycle
GPRS/EGPRS 850/1900	1:2.67 or 1:4 or 1:2 or 1:8.3
WCDMA<E FDD	1:1
LTE TDD	1:1.58 or 1:2.37

14.1 SAR results for 2G/3G/4G

ANT	Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	Test setup/Position	Note/ Fig No.	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 1g (W/kg)	Calculated SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Calculated SAR 10g (W/kg)	Power Drift
0	Body	F	GSM850	190	836.6	Rear GPRS(4) 15mm	/	28.89	30	0.506	0.65	0.356	0.46	0.08
0	Body	F	GSM850	190	836.6	Right Edge GPRS(4) 15mm	/	28.89	30	0.218	0.28	0.141	0.18	0.08
0	Body	F	GSM850	251	848.8	Bottom Edge GPRS(4) 15mm	/	28.82	30	0.647	0.85	0.432	0.57	-0.09
0	Body	F	GSM850	190	836.6	Bottom Edge GPRS(4) 15mm	/	28.89	30	0.491	0.63	0.328	0.42	0.02
0	Body	F	GSM850	128	824.2	Bottom Edge GPRS(4) 15mm	/	28.85	30	0.483	0.63	0.335	0.44	-0.15
0	Body	F	GSM850	251	848.8	Rear EGPRS(4) 15mm	/	28.78	30	0.623	0.83	0.421	0.56	-0.15
0	Body	F	GSM850	190	836.6	Rear GPRS(4) 0mm	Note1	22.3	23	0.932	1.10	0.41	0.48	-0.01
0	Body	F	GSM850	190	836.6	Right Edge GPRS(4) 0mm	Note1	22.3	23	0.279	0.33	0.191	0.22	0.15
0	Body	F	GSM850	251	848.8	Bottom Edge GPRS(4) 0mm	Note1	22.38	23	1.03	1.19	0.396	0.46	-0.02
0	Body	F	GSM850	190	836.6	Bottom Edge GPRS(4) 0mm	Note1/Fig.1	22.3	23	1.12	1.32	0.434	0.51	-0.03
0	Body	F	GSM850	128	824.2	Bottom Edge GPRS(4) 0mm	Note1	22.25	23	0.791	0.94	0.373	0.44	0.17
0	Body	F	GSM850	190	836.6	Bottom Edge EGPRS(4) 0mm	Note1	22.4	23	1.07	1.23	0.411	0.47	0.13
0	Body	F	GSM850	190	836.6	Rear GPRS(4) 0mm	Note2	20.48	21	0.606	0.68	0.322	0.36	-0.1
0	Body	F	GSM850	190	836.6	Right Edge GPRS(4) 0mm	Note2	20.48	21	0.235	0.26	0.156	0.18	0.16
0	Body	F	GSM850	251	848.8	Bottom Edge GPRS(4) 0mm	Note2	20.35	21	0.676	0.79	0.26	0.30	0.1
0	Body	F	GSM850	190	836.6	Bottom Edge GPRS(4) 0mm	Note2	20.48	21	0.71	0.80	0.273	0.31	-0.03
0	Body	F	GSM850	128	824.2	Bottom Edge GPRS(4) 0mm	Note2	20.33	21	0.668	0.78	0.249	0.29	0.08
0	Body	F	GSM850	190	836.6	Bottom Edge EGPRS(4) 0mm	Note2	20.43	21	0.657	0.75	0.241	0.27	-0.14
1	Body	F	GSM1900	810	1909.8	Rear GPRS(4) 15mm	/	26.12	27.5	0.393	0.54	0.225	0.31	0.14
1	Body	F	GSM1900	661	1880	Rear GPRS(4) 15mm	/	26.18	27.5	0.398	0.54	0.224	0.30	0.04
1	Body	F	GSM1900	512	1850.2	Rear GPRS(4) 15mm	/	26.15	27.5	0.384	0.52	0.216	0.29	-0.06
1	Body	F	GSM1900	661	1880	Right Edge GPRS(4) 15mm	/	26.18	27.5	0.347	0.47	0.203	0.28	-0.09
1	Body	F	GSM1900	661	1880	Rear EGPRS(4) 15mm	/	26.15	27.5	0.375	0.51	0.204	0.28	-0.14
1	Body	F	GSM1900	810	1909.8	Rear GPRS(4) 0mm	Note1	16.34	17	0.949	1.10	0.524	0.61	-0.13
1	Body	F	GSM1900	661	1880	Rear GPRS(4) 0mm	Note1/Fig.2	16.3	17	0.961	1.13	0.406	0.48	0.06
1	Body	F	GSM1900	512	1850.2	Rear GPRS(4) 0mm	Note1	16.08	17	0.807	1.00	0.443	0.55	-0.08
1	Body	F	GSM1900	661	1880	Right Edge GPRS(4) 0mm	Note1	16.3	17	0.379	0.45	0.182	0.21	0.14
1	Body	F	GSM1900	661	1880	Rear EGPRS(4) 0mm	Note1	16.4	17	0.948	1.09	0.399	0.46	0.13
1	Body	F	GSM1900	810	1909.8	Rear GPRS(4) 0mm	Note2	14.13	15	0.665	0.81	0.27	0.33	0.01
1	Body	F	GSM1900	661	1880	Rear GPRS(4) 0mm	Note2	14.1	15	0.585	0.72	0.24	0.30	-0.09
1	Body	F	GSM1900	512	1850.2	Rear GPRS(4) 0mm	Note2	14.01	15	0.552	0.69	0.224	0.28	0.01
1	Body	F	GSM1900	661	1880	Right Edge GPRS(4) 0mm	Note2	14.1	15	0.228	0.28	0.084	0.10	-0.09
1	Body	F	WCDMA1900	9538	1907.6	Rear 15mm	/	24.04	25	0.646	0.81	0.364	0.45	0.15
1	Body	F	WCDMA1900	9400	1880	Rear 15mm	/	24.06	25	0.634	0.79	0.363	0.45	-0.08
1	Body	F	WCDMA1900	9262	1852.4	Rear 15mm	/	24.1	25	0.671	0.83	0.389	0.48	0.04
1	Body	F	WCDMA1900	9400	1880	Right Edge 15mm	/	24.06	25	0.544	0.68	0.316	0.39	-0.15
1	Body	F	WCDMA1900	9538	1907.6	Rear 0mm	Note1	14.08	15	0.852	1.05	0.381	0.47	-0.02
1	Body	F	WCDMA1900	9400	1880	Rear 0mm	Note1	14.16	15	0.896	1.09	0.403	0.49	-0.14
1	Body	F	WCDMA1900	9262	1852.4	Rear 0mm	Note1/Fig.3	14.15	15	0.954	1.16	0.415	0.50	0.08
1	Body	F	WCDMA1900	9400	1880	Right Edge 0mm	Note1	14.16	15	0.396	0.48	0.145	0.18	0.1
1	Body	F	WCDMA1900	9538	1907.6	Rear 0mm	Note2	12.94	14	0.805	1.03	0.353	0.45	0.15
1	Body	F	WCDMA1900	9400	1880	Rear 0mm	Note2	13.06	14	0.809	1.00	0.355	0.44	-0.15
1	Body	F	WCDMA1900	9262	1852.4	Rear 0mm	Note2	12.98	14	0.82	1.04	0.33	0.42	0.01
1	Body	F	WCDMA1900	9400	1880	Right Edge 0mm	Note2	13.06	14	0.33	0.41	0.124	0.15	-0.04
1	Body	F	WCDMA1700	1513	1752.6	Rear 15mm	/	24.27	25	0.614	0.73	0.392	0.46	-0.07
1	Body	F	WCDMA1700	1412	1732.5	Rear 15mm	/	24.24	25	0.684	0.81	0.399	0.48	-0.04
1	Body	F	WCDMA1700	1312	1712.4	Rear 15mm	/	24.31	25	0.68	0.80	0.398	0.47	0.05
1	Body	F	WCDMA1700	1412	1732.5	Right Edge 15mm	/	24.24	25	0.438	0.52	0.275	0.33	-0.17
1	Body	F	WCDMA1700	1513	1752.6	Rear 0mm	Note1	13.62	14.5	0.952	1.17	0.405	0.50	0.1
1	Body	F	WCDMA1700	1412	1732.5	Rear 0mm	Note1/Fig.4	13.65	14.5	0.978	1.19	0.42	0.51	0.06
1	Body	F	WCDMA1700	1312	1712.4	Rear 0mm	Note1	13.64	14.5	0.951	1.16	0.338	0.41	0.03
1	Body	F	WCDMA1700	1412	1732.5	Right Edge 0mm	Note1	13.65	14.5	0.205	0.25	0.091	0.11	0.09
1	Body	F	WCDMA1700	1513	1752.6	Rear 0mm	Note2	12.43	13.5	0.689	0.88	0.288	0.37	0.05
1	Body	F	WCDMA1700	1412	1732.5	Rear 0mm	Note2	12.43	13.5	0.663	0.85	0.276	0.35	0.06
1	Body	F	WCDMA1700	1312	1712.4	Rear 0mm	Note2	12.54	13.5	0.642	0.80	0.273	0.34	-0.07
1	Body	F	WCDMA1700	1412	1732.5	Right Edge 0mm	Note2	12.43	13.5	0.136	0.17	0.06	0.08	-0.12
0	Body	F	WCDMA850	4183	836.6	Rear 15mm	/	23.69	24.5	0.291	0.35	0.209	0.25	0.07
0	Body	F	WCDMA850	4183	836.6	Right Edge 15mm	/	23.69	24.5	0.147	0.18	0.097	0.12	0.18
0	Body	F	WCDMA850	4233	846.6	Bottom Edge 15mm	/	23.59	24.5	0.327	0.40	0.224	0.28	0.09
0	Body	F	WCDMA850	4183	836.6	Bottom Edge 15mm	/	23.69	24.5	0.342	0.41	0.237	0.29	-0.03
0	Body	F	WCDMA850	4132	826.4	Bottom Edge 15mm	/	23.68	24.5	0.333	0.40	0.231	0.28	0.02
0	Body	F	WCDMA850	4233	846.6	Rear 0mm	Note1	16.72	18.5	0.665	1.00	0.24	0.36	0.05
0	Body	F	WCDMA850	4183	836.6	Rear 0mm	Note1	16.79	18.5	0.612	0.91	0.234	0.35	-0.11
0	Body	F	WCDMA850	4132	826.4	Rear 0mm	Note1/Fig.5	16.75	18.5	0.695	1.04	0.263	0.39	0.09
0	Body	F	WCDMA850	4183	836.6	Right Edge 0mm	Note1	16.79	18.5	0.269	0.40	0.11	0.16	0.07
0	Body	F	WCDMA850	4233	846.6	Bottom Edge 0mm	Note1	16.72	18.5	0.499	0.75	0.208	0.31	0.11
0	Body	F	WCDMA850	4183	836.6	Bottom Edge 0mm	Note1	16.79	18.5	0.481	0.71	0.204	0.30	0.07
0	Body	F	WCDMA850	4132	826.4	Bottom Edge 0mm	Note1	16.75	18.5	0.525	0.79	0.221	0.33	-0.11
0	Body	F	WCDMA850	4183	836.6	Rear 0mm	Note2	15.47	16	0.426	0.48	0.174	0.20	-0.12
0	Body	F	WCDMA850	4183	836.6	Right Edge 0mm	Note2	15.47	16	0.193	0.22	0.077	0.09	-0.04
0	Body	F	WCDMA850	4233	846.6	Bottom Edge 0mm	Note2	15.4	16	0.413	0.47	0.144	0.17	0.12
0	Body	F	WCDMA850	4183	836.6	Bottom Edge 0mm	Note2	15.47	16	0.447	0.51	0.149	0.17	0.10
0	Body	F	WCDMA850	4132	826.4	Bottom Edge 0mm	Note2	15.46	16	0.433	0.49	0.146	0.17	-0.07

Note1: The results for WWAN transmit alone.

Note2: The results for WWAN transmit with WIFI.



ANT	Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	Test setup/Position	Note/ Fig No.	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 1g (W/kg)	Calculated SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Calculated SAR 10g (W/kg)	Power Drift
1	Body	F	LTE Band2	18700	1860	1RB-Middle Rear 15mm	/	24.25	25	0.396	0.47	0.236	0.28	-0.13
1	Body	F	LTE Band2	18700	1860	1RB-Middle Right Edge 15mm	/	24.25	25	0.414	0.49	0.246	0.29	0.19
1	Body	F	LTE Band2	18700	1860	50RB-Middle Rear 15mm	/	23.25	24	0.321	0.38	0.192	0.23	0.11
1	Body	F	LTE Band2	18700	1860	50RB-Middle Right Edge 15mm	/	23.25	24	0.293	0.35	0.176	0.21	0.16
1	Body	F	LTE Band2	19100	1900	1RB-Middle Rear 0mm	Note1	14.97	16	1.11	1.41	0.458	0.58	0.14
1	Body	F	LTE Band2	18900	1880	1RB-Middle Rear 0mm	Note1/Fig.6	14.98	16	1.12	1.42	0.462	0.58	0.02
1	Body	F	LTE Band2	18700	1860	1RB-Middle Rear 0mm	Note1	14.99	16	1.1	1.39	0.453	0.57	0.01
1	Body	F	LTE Band2	18900	1880	100RB Rear 0mm	Note1	14.01	15	0.866	1.09	0.368	0.46	0.07
1	Body	F	LTE Band2	18700	1860	1RB-Middle Right Edge 0mm	Note1	14.99	16	0.448	0.57	0.151	0.19	-0.12
1	Body	F	LTE Band2	19100	1900	50RB-High Rear 0mm	Note1	13.96	15	0.85	1.08	0.366	0.47	0.02
1	Body	F	LTE Band2	18900	1880	50RB-Middle Rear 0mm	Note1	13.99	15	0.831	1.05	0.36	0.45	0.09
1	Body	F	LTE Band2	18700	1860	50RB-High Rear 0mm	Note1	14.01	15	0.837	1.05	0.366	0.46	0.13
1	Body	F	LTE Band2	18700	1860	50RB-Middle Right Edge 0mm	Note1	14.01	15	0.305	0.38	0.11	0.14	-0.05
1	Body	F	LTE Band2	19100	1900	1RB-Low Rear 0mm	Note2	12.81	13.5	0.731	0.86	0.288	0.34	-0.12
1	Body	F	LTE Band2	18900	1880	1RB-Middle Rear 0mm	Note2	12.87	13.5	0.751	0.87	0.302	0.35	0.01
1	Body	F	LTE Band2	18700	1860	1RB-Low Rear 0mm	Note2	12.85	13.5	0.742	0.86	0.292	0.34	0.12
1	Body	F	LTE Band2	18900	1880	1RB-Middle Right Edge 0mm	Note2	12.87	13.5	0.27	0.31	0.1	0.12	0.11
1	Body	F	LTE Band2	18900	1880	50RB-Middle Rear 0mm	Note2	11.93	12.5	0.538	0.61	0.231	0.26	0.07
1	Body	F	LTE Band2	18900	1880	50RB-Middle Right Edge 0mm	Note2	11.93	12.5	0.203	0.23	0.079	0.09	-0.14
1	Body	F	LTE Band2	18900	1880	1RB-Middle Rear 0mm	Note3	11	12	0.447	0.56	0.183	0.23	0.09
1	Body	F	LTE Band2	18900	1880	1RB-Middle Right Edge 0mm	Note3	11	12	0.165	0.21	0.07	0.09	-0.15
1	Body	F	LTE Band2	18900	1880	50RB-Middle Rear 0mm	Note3	10.91	11	0.333	0.34	0.137	0.14	0.07
1	Body	F	LTE Band2	18900	1880	50RB-Middle Right Edge 0mm	Note3	10.91	11	0.137	0.14	0.051	0.05	-0.12
0	Body	F	LTE Band7	21350	2560	1RB-Middle Rear 15mm	/	23.92	24	0.381	0.39	0.203	0.21	0.1
0	Body	F	LTE Band7	21350	2560	1RB-Middle Right Edge 15mm	/	23.92	24	0.525	0.53	0.268	0.27	-0.18
0	Body	F	LTE Band7	21350	2560	1RB-Middle Bottom Edge 15mm	/	23.92	24	0.15	0.15	0.082	0.08	0.15
0	Body	F	LTE Band7	21350	2560	50RB-Middle Rear 15mm	/	22.94	23	0.302	0.31	0.16	0.16	0.08
0	Body	F	LTE Band7	21350	2560	50RB-Middle Right Edge 15mm	/	22.94	23	0.469	0.48	0.233	0.24	0.05
0	Body	F	LTE Band7	21350	2560	50RB-Middle Bottom 15mm	/	22.94	23	0.136	0.14	0.069	0.07	-0.09
0	Body	F	LTE Band7	21350	2560	1RB-Middle Rear 0mm	Note1/fig.7	13.66	14.5	0.603	0.73	0.221	0.27	0.05
0	Body	F	LTE Band7	21350	2560	1RB-Middle Right Edge 0mm	Note1	13.66	14.5	0.197	0.24	0.069	0.08	-0.03
0	Body	F	LTE Band7	21350	2560	1RB-Middle Bottom Edge 0mm	Note1	13.66	14.5	0.325	0.39	0.11	0.13	-0.06
0	Body	F	LTE Band7	21350	2560	50RB-Middle Rear 0mm	Note1	12.75	13.5	0.479	0.57	0.164	0.19	0.03
0	Body	F	LTE Band7	21350	2560	50RB-Middle Right Edge 0mm	Note1	12.75	13.5	0.128	0.15	0.048	0.06	-0.08
0	Body	F	LTE Band7	21350	2560	50RB-Middle Bottom Edge 0mm	Note1	12.75	13.5	0.242	0.29	0.084	0.10	-0.05
0	Body	F	LTE Band7	21350	2560	CA 7C Rear 0mm	Note4	13.73	14.5	0.565	0.67	0.196	0.23	0.16
0	Body	F	LTE Band7	21350	2560	1RB-Middle Rear 0mm	Note2	11.5	12.5	0.396	0.50	0.125	0.16	0.01
0	Body	F	LTE Band7	21350	2560	1RB-Middle Right Edge 0mm	Note2	11.5	12.5	0.16	0.20	0.057	0.07	-0.06
0	Body	F	LTE Band7	21350	2560	1RB-Middle Bottom Edge 0mm	Note2	11.5	12.5	0.214	0.27	0.065	0.08	0.17
0	Body	F	LTE Band7	21350	2560	50RB-Middle Rear 0mm	Note2	10.54	11.5	0.345	0.43	0.099	0.12	0.07
0	Body	F	LTE Band7	21350	2560	50RB-Middle Right Edge 0mm	Note2	10.54	11.5	0.135	0.17	0.045	0.06	-0.15
0	Body	F	LTE Band7	21350	2560	50RB-Middle Bottom Edge 0mm	Note2	10.54	11.5	0.168	0.21	0.053	0.07	0.07
0	Body	F	LTE Band7	21350	2560	1RB-Middle Rear 0mm	Note3	9.63	10.5	0.246	0.30	0.094	0.11	-0.15
0	Body	F	LTE Band7	21350	2560	1RB-Middle Right Edge 0mm	Note3	9.63	10.5	0.085	0.10	0.035	0.04	0.02
0	Body	F	LTE Band7	21350	2560	1RB-Middle Bottom Edge 0mm	Note3	9.63	10.5	0.112	0.14	0.041	0.05	-0.06
0	Body	F	LTE Band7	21350	2560	50RB-Middle Rear 0mm	Note3	8.64	9.5	0.196	0.24	0.079	0.10	0.14
0	Body	F	LTE Band7	21350	2560	50RB-Middle Right Edge 0mm	Note3	8.64	9.5	0.061	0.07	0.026	0.03	0.11
0	Body	F	LTE Band7	21350	2560	50RB-Middle Bottom Edge 0mm	Note3	8.64	9.5	0.091	0.11	0.035	0.04	-0.09
0	Body	F	LTE Band12	23060	704	1RB-Middle Rear 15mm	/	23.95	25	0.141	0.18	0.103	0.13	0.16
0	Body	F	LTE Band12	23060	704	1RB-Middle Right Edge 15mm	/	23.95	25	0.062	0.08	0.04	0.05	0.02
0	Body	F	LTE Band12	23060	704	1RB-Middle Bottom Edge 15mm	/	23.95	25	0.157	0.20	0.111	0.14	-0.03
0	Body	F	LTE Band12	23060	704	25RB-High Rear 15mm	/	22.86	24	0.11	0.14	0.081	0.11	-0.01
0	Body	F	LTE Band12	23060	704	25RB-High Right Edge 15mm	/	22.86	24	0.055	0.07	0.035	0.05	0.11
0	Body	F	LTE Band12	23060	704	25RB-High Bottom Edge 15mm	/	22.86	24	0.108	0.14	0.076	0.10	-0.18
0	Body	F	LTE Band12	23130	711	1RB-Middle Rear 0mm	/	17.58	18.5	0.317	0.39	0.172	0.21	-0.17
0	Body	F	LTE Band12	23130	711	1RB-Middle Right 0mm	/	17.58	18.5	0.205	0.25	0.087	0.11	0.12
0	Body	F	LTE Band12	23130	711	1RB-Middle Bottom Edge 0mm	Fig.8	17.58	18.5	0.578	0.71	0.205	0.25	0.02
0	Body	F	LTE Band12	23095	707.5	25RB-Low Rear 0mm	/	16.56	17.5	0.274	0.34	0.144	0.18	-0.09
0	Body	F	LTE Band12	23095	707.5	25RB-Low Right Edge 0mm	/	16.56	17.5	0.163	0.20	0.07	0.09	-0.04
0	Body	F	LTE Band12	23095	707.5	25RB-Low Bottom Edge 0mm	/	16.56	17.5	0.335	0.42	0.144	0.18	0.05
0	Body	F	LTE Band13	23230	782	1RB-Middle Rear 15mm	/	24.06	25	0.308	0.38	0.229	0.28	0.09
0	Body	F	LTE Band13	23230	782	1RB-Middle Right Edge 15mm	/	24.06	25	0.165	0.20	0.111	0.14	0.05
0	Body	F	LTE Band13	23230	782	1RB-Middle Bottom Edge 15mm	/	24.06	25	0.369	0.46	0.261	0.32	-0.02
0	Body	F	LTE Band13	23230	782	25RB-Middle Rear 15mm	/	22.95	24	0.201	0.26	0.146	0.19	-0.14
0	Body	F	LTE Band13	23230	782	25RB-Middle Right Edge 15mm	/	22.95	24	0.135	0.17	0.089	0.11	0.15
0	Body	F	LTE Band13	23230	782	25RB-Middle Bottom 15mm	/	22.95	24	0.298	0.38	0.212	0.27	-0.14
0	Body	F	LTE Band13	23230	782	1RB-Low Rear 0mm	Note1	19.92	20.5	1	1.14	0.455	0.52	-0.03
0	Body	F	LTE Band13	23230	782	1RB-Low Right Edge 0mm	Note1	19.92	20.5	0.369	0.42	0.207	0.24	0.11
0	Body	F	LTE Band13	23230	782	1RB-Low Bottom Edge 0mm	Note1/fig.9	19.92	20.5	1.06	1.21	0.379	0.43	-0.13
0	Body	F	LTE Band13	23230	782	25RB-Middle Rear 0mm	Note1	18.86	19.5	0.695	0.81	0.291	0.34	-0.16
0	Body	F	LTE Band13	23230	782	50RB Rear 0mm	Note1	18.85	19.5	0.667	0.77	0.278	0.32	-0.16
0	Body	F	LTE Band13	23230	782	25RB-Middle Right Edge 0mm	Note1	18.86	19.5	0.315	0.37	0.117	0.14	-0.01
0	Body	F	LTE Band13	23230	782	25RB-Middle Bottom Edge 0mm	Note1	18.86	19.5	0.94	1.09	0.305	0.35	0.18
0	Body	F	LTE Band13	23230	782	50RB Bottom Edge 0mm	Note1	18.85	19.5	0.957	1.11	0.313	0.36	0.09
0	Body	F	LTE Band13	23230	782	1RB-Middle Rear 0mm	Note2	17.76	18.5	0.486	0.58	0.229	0.27	0.12
0	Body	F	LTE Band13	23230	782	1RB-Middle Right Edge 0mm	Note2	17.76	18.5	0.219	0.26	0.107	0.13	-0.09
0	Body	F	LTE Band13	23230	782	1RB-Middle Bottom Edge 0mm	Note2	17.76	18.5	0.706	0.84	0.265	0.31	-0.06
0	Body	F	LTE Band13	23230	782	50RB Bottom Edge 0mm	Note2	16.64	17.5	0.412	0.50	0.178	0.22	0.12
0	Body	F	LTE Band13	23230	782	25RB-Middle Rear 0mm	Note2	16.71	17.5	0.382	0.46	0.178	0.21	0.13
0	Body	F	LTE Band13	23230	782	25RB-Middle Right Edge 0mm	Note2	16.71	17.5	0.151	0.18	0.07	0.08	-0.07
0	Body	F	LTE Band13	23230	782	25RB-Middle Bottom Edge 0mm	Note2	16.71	17.5	0.397	0.48	0.171	0.21	-0.11

Note1: The results for WWAN transmit alone.

Note2: The results for WWAN transmit with WIFI.

Note3: The results for ENDC transmit with WIFI.

Note4: Spot check results for UL CA_7C.

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ANT	Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	Test setup/Position	Note/ Fig No.	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 1g (W/kg)	Calculated SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Calculated SAR 10g (W/kg)	Power Drift
1	Body	F	LTE Band25	26140	1860	1RB-Middle Rear 15mm	/	24.33	25	0.584	0.68	0.339	0.40	-0.17
1	Body	F	LTE Band25	26140	1860	1RB-Middle Right Edge 15mm	/	24.33	25	0.497	0.58	0.291	0.34	-0.15
1	Body	F	LTE Band25	26140	1860	50RB-High Rear 15mm	/	23.31	24	0.455	0.53	0.266	0.31	0.14
1	Body	F	LTE Band25	26140	1860	50RB-High Right Edge 15mm	/	23.31	24	0.391	0.46	0.226	0.26	0.12
1	Body	F	LTE Band25	26590	1905	1RB-Middle Rear 0mm	Note1	14.9	15.5	1.03	1.18	0.45	0.52	-0.1
1	Body	F	LTE Band25	26365	1882.5	1RB-Middle Rear 0mm	Note1/Fig.10	14.92	15.5	1.04	1.19	0.461	0.53	-0.1
1	Body	F	LTE Band25	26140	1860	1RB-Middle Rear 0mm	Note1	14.95	15.5	1.02	1.16	0.454	0.52	0.03
1	Body	F	LTE Band25	26365	1882.5	100RB Rear 0mm	Note1	13.97	14.5	0.813	0.92	0.381	0.43	0.06
1	Body	F	LTE Band25	26140	1860	1RB-Middle Right Edge 0mm	Note1	14.95	15.5	0.351	0.40	0.147	0.17	-0.02
1	Body	F	LTE Band25	26590	1905	50RB-High Rear 0mm	Note1	13.96	14.5	0.788	0.89	0.345	0.39	0.04
1	Body	F	LTE Band25	26365	1882.5	50RB-High Rear 0mm	Note1	14.01	14.5	0.793	0.89	0.344	0.39	-0.02
1	Body	F	LTE Band25	26140	1860	50RB-High Rear 0mm	Note1	14.03	14.5	0.825	0.92	0.369	0.41	-0.07
1	Body	F	LTE Band25	26140	1860	50RB-High Right Edge 0mm	Note1	14.03	14.5	0.285	0.32	0.126	0.14	0.15
1	Body	F	LTE Band25	26590	1905	1RB-Middle Rear 0mm	Note2	12.88	14	0.732	0.95	0.287	0.37	0.06
1	Body	F	LTE Band25	26365	1882.5	1RB-Middle Rear 0mm	Note2	12.92	14	0.76	0.97	0.299	0.38	-0.15
1	Body	F	LTE Band25	26140	1860	1RB-Middle Rear 0mm	Note2	12.9	14	0.745	0.96	0.291	0.37	-0.12
1	Body	F	LTE Band25	26365	1882.5	1RB-Middle Right Edge 0mm	Note2	11.99	13	0.297	0.37	0.105	0.13	0.06
1	Body	F	LTE Band25	26590	1905	50RB-Low Rear 0mm	Note2	11.92	13	0.641	0.82	0.284	0.36	-0.11
1	Body	F	LTE Band25	26365	1882.5	50RB-Low Rear 0mm	Note2	11.99	13	0.658	0.83	0.293	0.37	0.06
1	Body	F	LTE Band25	26140	1860	50RB-Low Rear 0mm	Note2	11.95	13	0.645	0.82	0.288	0.37	0.17
1	Body	F	LTE Band25	26365	1882.5	50RB-Low Right Edge 0mm	Note2	11.99	13	0.282	0.36	0.108	0.14	-0.08
0	Body	F	LTE Band26	26775	822.5	1RB-Middle Rear 15mm	/	24.01	25	0.335	0.42	0.243	0.31	0.03
0	Body	F	LTE Band26	26775	822.5	1RB-Middle Right Edge 15mm	/	24.01	25	0.196	0.25	0.131	0.16	0.02
0	Body	F	LTE Band26	26775	822.5	1RB-Middle Bottom Edge 15mm	/	24.01	25	0.359	0.45	0.249	0.31	-0.05
0	Body	F	LTE Band26	26775	822.5	36RB-Middle Rear 15mm	/	22.99	24	0.265	0.33	0.182	0.23	0.15
0	Body	F	LTE Band26	26775	822.5	36RB-Middle Right Edge 15mm	/	22.99	24	0.149	0.19	0.096	0.12	0.11
0	Body	F	LTE Band26	26775	822.5	36RB-Middle Bottom 15mm	/	22.99	24	0.294	0.37	0.203	0.26	-0.15
0	Body	F	LTE Band26	26865	831.5	1RB-Low Rear 0mm	Note1	17.77	18.5	0.669	0.79	0.247	0.29	0.11
0	Body	F	LTE Band26	26865	831.5	1RB-Low Right Edge 0mm	Note1	17.77	18.5	0.323	0.38	0.123	0.15	0.01
0	Body	F	LTE Band26	26965	841.5	1RB-Low Bottom Edge 0mm	Note1	17.72	18.5	0.733	0.88	0.259	0.31	0.05
0	Body	F	LTE Band26	26865	831.5	1RB-Low Bottom Edge 0mm	Note1	17.77	18.5	0.846	1.00	0.281	0.33	0.02
0	Body	F	LTE Band26	26765	821.5	1RB-Mid Bottom Edge 0mm	Note1/Fig.11	17.76	18.5	0.871	1.03	0.298	0.35	-0.15
0	Body	F	LTE Band26	26765	821.5	75RB Bottom Edge 0mm	Note1	16.8	17.5	0.757	0.89	0.222	0.26	0.03
0	Body	F	LTE Band26	26865	831.5	36RB-Low Rear 0mm	Note1	16.84	17.5	0.544	0.63	0.2	0.23	0.15
0	Body	F	LTE Band26	26865	831.5	36RB-Low Right Edge 0mm	Note1	16.84	17.5	0.182	0.21	0.102	0.12	-0.1
0	Body	F	LTE Band26	26865	831.5	36RB-Low Bottom Edge 0mm	Note1	16.84	17.5	0.736	0.86	0.227	0.26	0.12
0	Body	F	LTE Band26	26965	841.5	1RB-Middle Rear 0mm	Note2	15.96	17	0.225	0.29	0.115	0.15	-0.16
0	Body	F	LTE Band26	26965	841.5	1RB-Middle Right Edge 0mm	Note2	15.96	17	0.073	0.09	0.052	0.07	0.09
0	Body	F	LTE Band26	26965	841.5	1RB-Middle Bottom Edge 0mm	Note2	15.96	17	0.371	0.47	0.138	0.18	-0.02
0	Body	F	LTE Band26	26965	841.5	36RB-Low Rear 0mm	Note2	14.95	16	0.188	0.24	0.092	0.12	-0.07
0	Body	F	LTE Band26	26965	841.5	36RB-Low Right Edge 0mm	Note2	14.95	16	0.081	0.10	0.043	0.05	-0.11
0	Body	F	LTE Band26	26965	841.5	36RB-Low Bottom Edge 0mm	Note2	14.95	16	0.323	0.41	0.117	0.15	0.07
3	Body	F	LTE B41 PC3	41055	2636.5	1RB-Middle Rear 15mm	/	23.63	24.5	0.287	0.35	0.149	0.18	0.01
3	Body	F	LTE B41 PC3	41055	2636.5	1RB-Middle Right Edge 15mm	/	23.63	24.5	0.47	0.57	0.237	0.29	0.15
3	Body	F	LTE B41 PC3	41055	2636.5	50RB-Low Rear 15mm	/	22.61	23.5	0.243	0.30	0.124	0.15	-0.02
3	Body	F	LTE B41 PC3	41055	2636.5	50RB-Low Right Edge 15mm	/	22.61	23.5	0.366	0.45	0.185	0.23	-0.02
3	Body	F	LTE B41 PC3	41490	2680	1RB-Middle Rear 0mm	Note1	11.5	12.5	0.572	0.72	0.173	0.22	-0.07
3	Body	F	LTE B41 PC3	41055	2636.5	1RB-Middle Rear 0mm	Note1/Fig.12	11.52	12.5	0.641	0.80	0.217	0.27	0.06
3	Body	F	LTE B41 PC3	40620	2593	1RB-Middle Rear 0mm	Note1	11.64	12.5	0.613	0.75	0.211	0.26	0.15
3	Body	F	LTE B41 PC3	40185	2549.5	1RB-Middle Rear 0mm	Note1	11.58	12.5	0.534	0.66	0.181	0.22	0.14
3	Body	F	LTE B41 PC3	39750	2506	1RB-Middle Rear 0mm	Note1	11.85	12.5	0.589	0.68	0.208	0.24	-0.09
3	Body	F	LTE B41 PC3	41055	2636.5	100RB Rear 0mm	Note1	10.21	11.5	0.503	0.68	0.17	0.23	-0.03
3	Body	F	LTE B41 PC3	39750	2506	1RB-Middle Right Edge 0mm	Note1	10.82	11.5	0.29	0.34	0.124	0.15	0.17
3	Body	F	LTE B41 PC3	39750	2506	50RB-Middle Rear 0mm	Note1	10.82	11.5	0.363	0.42	0.141	0.16	0.1
3	Body	F	LTE B41 PC3	39750	2506	50RB-Middle Right Edge 0mm	Note1	10.82	11.5	0.235	0.27	0.091	0.11	-0.09
3	Body	F	LTE B41 PC3	39750	2506	CA_41C Rear 0mm	Note4	11.89	12.5	0.612	0.70	0.173	0.20	0.13
3	Body	F	LTE B41 PC3	41055	2636.5	1RB-Middle Rear 0mm	Note2	9.15	10	0.352	0.43	0.119	0.14	0.01
3	Body	F	LTE B41 PC3	41055	2636.5	1RB-Middle Right Edge 0mm	Note2	9.15	10	0.138	0.17	0.045	0.05	-0.09
3	Body	F	LTE B41 PC3	41055	2636.5	50RB-Middle Rear 0mm	Note2	8.16	9	0.275	0.33	0.09	0.11	0.15
3	Body	F	LTE B41 PC3	41055	2636.5	50RB-Middle Right Edge 0mm	Note2	8.16	9	0.093	0.11	0.034	0.04	0.04
3	Body	F	LTE B41 PC2	41055	2636.5	1RB-Middle Rear 15mm	/	26.6	27.5	0.377	0.46	0.195	0.24	0.18
3	Body	F	LTE B41 PC2	41055	2636.5	1RB-Middle Right Edge 15mm	/	26.6	27.5	0.636	0.78	0.32	0.39	0.09
3	Body	F	LTE B41 PC2	41055	2636.5	50RB-Middle Rear 15mm	/	25.61	26.5	0.302	0.37	0.157	0.19	-0.13
3	Body	F	LTE B41 PC2	41055	2636.5	50RB-Middle Right Edge 15mm	/	25.61	26.5	0.469	0.58	0.239	0.29	0.08
3	Body	F	LTE B41 PC2	41490	2680	1RB-Middle Rear 0mm	Note1	14.57	16	0.842	1.17	0.3	0.42	-0.1
3	Body	F	LTE B41 PC2	41055	2636.5	1RB-Middle Rear 0mm	Note1/Fig.13	14.42	16	0.852	1.23	0.289	0.42	0.03
3	Body	F	LTE B41 PC2	40620	2593	1RB-Middle Rear 0mm	Note1	14.69	16	0.83	1.12	0.305	0.41	-0.04
3	Body	F	LTE B41 PC2	40185	2549.5	1RB-Middle Rear 0mm	Note1	14.62	16	0.807	1.11	0.303	0.42	0.18
3	Body	F	LTE B41 PC2	39750	2506	1RB-Middle Rear 0mm	Note1	14.89	16	0.798	1.03	0.3	0.39	-0.12
3	Body	F	LTE B41 PC2	41055	2636.5	100RB Rear 0mm	Note1	13.2	15	0.677	1.02	0.244	0.37	0.06
3	Body	F	LTE B41 PC2	39750	2506	1RB-Middle Right Edge 0mm	Note1	14.89	16	0.387	0.50	0.191	0.25	-0.03
3	Body	F	LTE B41 PC2	39750	2506	50RB-Middle Rear 0mm	Note1	13.82	15	0.498	0.65	0.204	0.27	-0.06
3	Body	F	LTE B41 PC2	39750	2506	50RB-Middle Right Edge 0mm	Note1	13.82	15	0.309	0.41	0.126	0.17	-0.16
3	Body	F	LTE B41 PC2	41055	2636.5	1RB-Middle Rear 0mm	Note2	12.16	13	0.421	0.51	0.144	0.17	0.07
3	Body	F	LTE B41 PC2	41055	2636.5	1RB-Middle Right Edge 0mm	Note2	12.16	13	0.136	0.17	0.052	0.06	0.06
3	Body	F	LTE B41 PC2	41055	2636.5	50RB-Middle Rear 0mm	Note2	11.13	12	0.313	0.38	0.109	0.13	-0.09
3	Body	F	LTE B41 PC2	41055	2636.5	50RB-Middle Right Edge 0mm	Note2	11.13	12	0.104	0.13	0.042	0.05	-0.11

Note1: The results for WWAN transmit alone.

Note2: The results for WWAN transmit with WIFI.

Note4: Spot check results for UL CA_41C.

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ANT	Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	Test setup/Position	Note/ Fig No.	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 1g (W/kg)	Calculated SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Calculated SAR 10g (W/kg)	Power Drift
1	Body	F	LTE Band66	132572	1770	1RB-Middle Rear 15mm	/	24.68	25.5	0.671	0.81	0.394	0.48	0.09
1	Body	F	LTE Band66	132322	1745	1RB-Middle Rear 15mm	/	24.77	25.5	0.697	0.82	0.41	0.49	-0.04
1	Body	F	LTE Band66	132072	1720	1RB-Middle Rear 15mm	/	24.7	25.5	0.664	0.80	0.387	0.47	-0.12
1	Body	F	LTE Band66	132322	1745	100RB Rear 15mm	/	23.71	24.5	0.487	0.58	0.275	0.33	0.07
1	Body	F	LTE Band66	132322	1745	1RB-Middle Right Edge 15mm	/	24.77	25.5	0.48	0.57	0.294	0.35	-0.03
1	Body	F	LTE Band66	132322	1745	50RB-High Rear 15mm	/	23.73	24.5	0.511	0.61	0.296	0.35	0.05
1	Body	F	LTE Band66	132322	1745	50RB-High Right Edge 15mm	/	23.73	24.5	0.373	0.45	0.229	0.27	0.09
1	Body	F	LTE Band66	132572	1770	1RB-Middle Rear 0mm	Note1/Fig.14	14.86	16	1.04	1.35	0.47	0.61	-0.05
1	Body	F	LTE Band66	132322	1745	1RB-Middle Rear 0mm	Note1	14.93	16	1.03	1.32	0.455	0.58	-0.09
1	Body	F	LTE Band66	132072	1720	1RB-Middle Rear 0mm	Note1	15	16	1.03	1.30	0.457	0.58	0.07
1	Body	F	LTE Band66	132572	1770	100RB Rear 0mm	Note1	13.93	15	0.827	1.06	0.37	0.47	0.09
1	Body	F	LTE Band66	132072	1720	1RB-Middle Right Edge 0mm	Note1	15	16	0.159	0.20	0.066	0.08	0.11
1	Body	F	LTE Band66	132572	1770	50RB-Low Rear 0mm	Note1	13.97	15	0.822	1.04	0.368	0.47	0.18
1	Body	F	LTE Band66	132322	1745	50RB-Low Rear 0mm	Note1	13.97	15	0.844	1.07	0.38	0.48	0.08
1	Body	F	LTE Band66	132072	1720	50RB-Middle Rear 0mm	Note1	13.98	15	0.826	1.04	0.373	0.47	0.1
1	Body	F	LTE Band66	132072	1720	50RB-Middle Right Edge 0mm	Note1	13.98	15	0.16	0.20	0.073	0.09	-0.11
1	Body	F	LTE Band66	132572	1770	1RB-Middle Rear 0mm	Note2	12.75	14	0.701	0.93	0.292	0.39	0.16
1	Body	F	LTE Band66	132322	1745	1RB-Middle Rear 0mm	Note2	12.84	14	0.712	0.93	0.303	0.40	-0.04
1	Body	F	LTE Band66	132072	1720	1RB-Middle Rear 0mm	Note2	12.91	14	0.728	0.94	0.312	0.40	0.02
1	Body	F	LTE Band66	132072	1720	100RB Rear 0mm	Note2	11.79	13	0.583	0.77	0.245	0.32	-0.17
1	Body	F	LTE Band66	132072	1720	1RB-Middle Right Edge 0mm	Note2	12.91	14	0.136	0.17	0.059	0.08	-0.16
1	Body	F	LTE Band66	132072	1720	50RB-Low Rear 0mm	Note2	11.94	13	0.594	0.76	0.251	0.32	-0.11
1	Body	F	LTE Band66	132072	1720	50RB-Low Right Edge 0mm	Note2	11.94	13	0.107	0.14	0.046	0.06	0.13
1	Body	F	LTE Band66	132072	1720	1RB-Middle Rear 0mm	Note3	10.97	12	0.437	0.55	0.191	0.24	0.06
1	Body	F	LTE Band66	132072	1720	1RB-Middle Right Edge 0mm	Note3	10.97	12	0.08	0.10	0.036	0.05	-0.12
1	Body	F	LTE Band66	132072	1720	50RB-High Rear 0mm	Note3	9.95	11	0.285	0.36	0.14	0.18	0.07
1	Body	F	LTE Band66	132072	1720	50RB-High Right Edge 0mm	Note3	9.95	11	0.058	0.07	0.027	0.03	-0.12
0	Body	F	LTE Band71	133372	688	1RB-Middle Rear 15mm	/	24.35	25.5	0.226	0.29	0.163	0.21	0.04
0	Body	F	LTE Band71	133372	688	1RB-Middle Right Edge 15mm	/	24.35	25.5	0.088	0.11	0.059	0.08	-0.08
0	Body	F	LTE Band71	133372	688	1RB-Middle Bottom Edge 15mm	/	24.35	25.5	0.162	0.21	0.112	0.15	-0.18
0	Body	F	LTE Band71	133372	688	50RB-Low Rear 15mm	/	23.35	24.5	0.184	0.24	0.135	0.18	0.08
0	Body	F	LTE Band71	133372	688	50RB-Low Right Edge 15mm	/	23.35	24.5	0.067	0.09	0.049	0.06	-0.15
0	Body	F	LTE Band71	133372	688	50RB-Low Bottom Edge 15mm	/	23.35	24.5	0.145	0.19	0.101	0.13	-0.15
0	Body	F	LTE Band71	133222	673	1RB-Middle Rear 0mm	Note1	20.28	21	0.854	1.01	0.344	0.41	-0.13
0	Body	F	LTE Band71	133322	683	1RB-Middle Rear 0mm	Note1	20.25	21	0.859	1.02	0.349	0.41	0.06
0	Body	F	LTE Band71	133372	688	1RB-Middle Rear 0mm	Note1	20.23	21	0.75	0.90	0.315	0.38	0.02
0	Body	F	LTE Band71	133322	683	100RB Rear 0mm	Note1	19.16	20	0.687	0.83	0.251	0.30	0.09
0	Body	F	LTE Band71	133222	673	1RB-Middle Right Edge 0mm	Note1	20.28	21	0.362	0.43	0.166	0.20	-0.1
0	Body	F	LTE Band71	133222	673	1RB-Middle Bottom Edge 0mm	Note1/Fig.15	20.28	21	1.04	1.23	0.361	0.43	-0.03
0	Body	F	LTE Band71	133322	683	1RB-Middle Bottom Edge 0mm	Note1	20.25	21	0.99	1.18	0.355	0.42	0.08
0	Body	F	LTE Band71	133372	688	1RB-Middle Bottom Edge 0mm	Note1	20.23	21	1.02	1.22	0.368	0.44	-0.05
0	Body	F	LTE Band71	133222	673	100RB Bottom Edge 0mm	Note1	19.21	20	0.826	0.99	0.258	0.31	-0.07
0	Body	F	LTE Band71	133222	673	50RB-Low Rear 0mm	Note1	19.33	20	0.672	0.78	0.28	0.33	0.05
0	Body	F	LTE Band71	133322	683	50RB-Low Rear 0mm	Note1	19.26	20	0.684	0.81	0.306	0.36	0.13
0	Body	F	LTE Band71	133372	688	50RB-Low Rear 0mm	Note1	19.24	20	0.663	0.79	0.294	0.35	0.17
0	Body	F	LTE Band71	133222	673	50RB-Low Right Edge 0mm	Note1	19.33	20	0.345	0.40	0.141	0.16	0.18
0	Body	F	LTE Band71	133222	673	50RB-Low Bottom Edge 0mm	Note1	19.33	20	0.65	0.76	0.202	0.24	0.05
0	Body	F	LTE Band71	133322	683	50RB-Low Bottom Edge 0mm	Note1	19.26	20	0.673	0.80	0.244	0.29	-0.12
0	Body	F	LTE Band71	133372	688	50RB-Low Bottom Edge 0mm	Note1	19.24	20	0.655	0.78	0.211	0.25	-0.15
0	Body	F	LTE Band71	133322	683	1RB-Middle Rear 0mm	Note2	18.36	19	0.648	0.75	0.236	0.27	-0.09
0	Body	F	LTE Band71	133322	683	1RB-Middle Right Edge 0mm	Note2	18.36	19	0.385	0.45	0.121	0.14	0.12
0	Body	F	LTE Band71	133322	683	1RB-Middle Bottom Edge 0mm	Note2	18.36	19	0.683	0.79	0.245	0.28	-0.02
0	Body	F	LTE Band71	133322	683	50RB-Middle Rear 0mm	Note2	17.25	18	0.601	0.71	0.202	0.24	0.06
0	Body	F	LTE Band71	133322	683	50RB-Middle Right Edge 0mm	Note2	17.25	18	0.285	0.34	0.098	0.12	-0.11
0	Body	F	LTE Band71	133322	683	50RB-Middle Bottom Edge 0mm	Note2	17.25	18	0.549	0.65	0.196	0.23	-0.14

Note1: The results for WWAN transmit alone.

Note2: The results for WWAN transmit with WIFI.

Note3: The results for ENDC transmit with WIFI.

ANT	Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	Test setup/Position	Note/ Fig No.	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 1g (W/kg)	Calculated SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Calculated SAR 10g (W/kg)	Power Drift
3	Body	F	LTE Band2	18900	1880	1RB-Middle Rear 15mm	/	23.69	25	0.577	0.78	0.304	0.41	0.13
3	Body	F	LTE Band2	18900	1880	1RB-Middle Right Edge 15mm	/	23.69	25	0.555	0.75	0.3	0.41	0.06
3	Body	F	LTE Band2	18900	1880	50RB-Middle Rear 15mm	/	22.68	24	0.52	0.70	0.273	0.37	-0.03
3	Body	F	LTE Band2	18900	1880	50RB-Middle Right Edge 15mm	/	22.68	24	0.468	0.63	0.253	0.34	0.06
3	Body	F	LTE Band2	18900	1880	1RB-Middle Rear 0mm	Note1	12.71	13	0.68	0.73	0.306	0.33	0.06
3	Body	F	LTE Band2	18900	1880	1RB-Middle Right Edge 0mm	Note1	12.71	13	0.621	0.66	0.242	0.26	0.1
3	Body	F	LTE Band2	18900	1880	50RB-Middle Rear 0mm	Note1/Fig.16	12.83	13	0.761	0.79	0.295	0.31	0.02
3	Body	F	LTE Band2	18900	1880	50RB-Middle Right Edge 0mm	Note1	12.83	13	0.546	0.57	0.243	0.25	0.13
3	Body	F	LTE Band2	18900	1880	1RB-Middle Rear 0mm	Note2	10.61	11	0.477	0.52	0.186	0.20	0.09
3	Body	F	LTE Band2	18900	1880	1RB-Middle Right Edge 0mm	Note2	10.61	11	0.373	0.41	0.141	0.15	0.01
3	Body	F	LTE Band2	18900	1880	50RB-Middle Rear 0mm	Note2	10.63	11	0.472	0.51	0.164	0.18	0.08
3	Body	F	LTE Band2	18900	1880	50RB-Middle Right Edge 0mm	Note2	10.63	11	0.36	0.39	0.139	0.15	0.18
3	Body	F	LTE Band66	132322	1745	1RB-Middle Rear 15mm	/	24.03	25.5	0.409	0.57	0.241	0.34	0.03
3	Body	F	LTE Band66	132322	1745	1RB-Middle Right Edge 15mm	/	24.03	25.5	0.185	0.26	0.104	0.15	-0.07
3	Body	F	LTE Band66	132322	1745	50RB-High Rear 15mm	/	23.21	24.5	0.321	0.43	0.195	0.26	-0.18
3	Body	F	LTE Band66	132322	1745	50RB-High Right Edge 15mm	/	23.21	24.5	0.193	0.26	0.111	0.15	-0.11
3	Body	F	LTE Band66	132322	1745	1RB-Middle Rear 0mm	Note1/Fig.17	12.35	12.5	0.647	0.67	0.273	0.28	0.05
3	Body	F	LTE Band66	132322	1745	1RB-Middle Right Edge 0mm	Note1	12.35	12.5	0.272	0.28	0.116	0.12	0.02
3	Body	F	LTE Band66	132322	1745	50RB-High Rear 0mm	Note1	12.32	12.5	0.645	0.67	0.271	0.28	0.1
3	Body	F	LTE Band66	132322	1745	50RB-H Right Edge 0mm	Note1	12.32	12.5	0.3	0.31	0.115	0.12	-0.17
3	Body	F	LTE Band66	132322	1745	1RB-Middle Rear 0mm	Note2	10.48	11.5	0.385	0.49	0.166	0.21	0.08
3	Body	F	LTE Band66	132322	1745	1RB-Middle Right Edge 0mm	Note2	10.48	11.5	0.103	0.13	0.05	0.06	0.11
3	Body	F	LTE Band66	132322	1745	50RB-High Rear 0mm	Note2	10.48	11.5	0.353	0.45	0.169	0.21	0.07
3	Body	F	LTE Band66	132322	1745	50RB-High Right Edge 0mm	Note2	10.48	11.5	0.144	0.18	0.065	0.08	-0.04

Note1: The results for ENDC transmit alone.

Note2: The results for ENDC transmit with WIFI.

14.2 SAR results for 5G NR

ANT	Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	Test setup/Position	Note/Fig No.	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 1g (W/kg)	Calculated SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Calculated SAR 10g (W/kg)	Power Drift
N7 DFT-s-OFDM QPSK 15k 5M 12@6														
0	Body	F	N7	507000	2535	Rear 15mm	/	23.35	24	0.432	0.50	0.226	0.26	-0.09
0	Body	F	N7	507000	2535	Right Edge 15mm	Fig.18	23.35	24	0.68	0.79	0.343	0.40	0.09
0	Body	F	N7	507000	2535	Bottom Edge 15mm	/	23.35	24	0.139	0.16	0.074	0.09	-0.12
0	Body	F	N7	507000	2535	Right Edge 15mm	CP-OFDM QPSK	21.67	22.5	0.437	0.53	0.282	0.34	-0.05
N7 DFT-s-OFDM QPSK 15k 5M 12@6														
0	Body	F	N7	507000	2535	Rear 0mm	Note1	13.06	14	0.522	0.65	0.196	0.24	0.12
0	Body	F	N7	507000	2535	Right Edge 0mm	Note1	13.06	14	0.161	0.20	0.063	0.08	0.07
0	Body	F	N7	507000	2535	Bottom Edge 0mm	Note1	13.06	14	0.282	0.35	0.086	0.11	-0.06
N7 DFT-s-OFDM QPSK 15k 5M 12@6														
0	Body	F	N7	507000	2535	Rear 0mm	Note2	10.99	12	0.324	0.41	0.12	0.15	0.12
0	Body	F	N7	507000	2535	Right Edge 0mm	Note2	10.99	12	0.104	0.13	0.044	0.06	-0.04
0	Body	F	N7	507000	2535	Bottom Edge 0mm	Note2	10.99	12	0.197	0.25	0.065	0.08	-0.11
N7 DFT-s-OFDM QPSK 15k 5M 12@6														
0	Body	F	N7	507000	2535	Rear 0mm	Note3	9.29	10	0.216	0.25	0.083	0.10	0.03
0	Body	F	N7	507000	2535	Right Edge 0mm	Note3	9.29	10	0.07	0.08	0.03	0.04	-0.12
0	Body	F	N7	507000	2535	Bottom Edge 0mm	Note3	9.29	10	0.131	0.15	0.045	0.05	0.09
N25 DFT-s-OFDM QPSK 15k 5M 12@6														
1	Body	F	N25	376500	1882.5	Rear 15mm	/	23.68	24.5	0.499	0.60	0.283	0.34	0.13
1	Body	F	N25	376500	1882.5	Right Edge 15mm	/	23.68	24.5	0.4	0.48	0.237	0.29	0.06
N25 DFT-s-OFDM QPSK 15k 5M 12@6														
1	Body	F	N25	382500	1912.5	Rear 0mm	Note1	15.27	15.5	1.11	1.17	0.434	0.46	-0.1
1	Body	F	N25	376500	1882.5	Rear 0mm	Note1	15.35	15.5	1.09	1.13	0.431	0.45	0.11
1	Body	F	N25	370500	1882.5	Rear 0mm	Note1/Fig.19	15.28	15.5	1.12	1.18	0.449	0.47	0.01
1	Body	F	N25	376500	1882.5	Right Edge 0mm	Note1	15.35	15.5	0.465	0.48	0.158	0.16	0.15
1	Body	F	N25	370500	1882.5	Rear 0mm	CP-OFDM 16QAM	15.32	15.5	1.1	1.15	0.437	0.46	-0.07
N25 DFT-s-OFDM QPSK 15k 5M 12@6														
1	Body	F	N25	376500	1882.5	Rear 0mm	Note2	13.39	13.5	0.732	0.75	0.294	0.30	-0.03
1	Body	F	N25	376500	1882.5	Right Edge 0mm	Note2	13.39	13.5	0.305	0.31	0.108	0.11	0.12
N25 DFT-s-OFDM QPSK 15k 5M 12@6														
1	Body	F	N25	376500	1882.5	Rear 0mm	Note3	10.99	11.5	0.436	0.49	0.174	0.20	0.06
1	Body	F	N25	376500	1882.5	Right Edge 0mm	Note3	10.99	11.5	0.182	0.20	0.064	0.07	-0.12
N41 PC2 DFT-s-OFDM QPSK 30k 20M 25@12														
3	Body	F	N41	535998	2679.99	Rear 15mm	/	26.56	27	0.926	1.02	0.472	0.52	0.07
3	Body	F	N41	527298	2636.49	Rear 15mm	/	26.48	27	1.01	1.14	0.509	0.57	0.09
3	Body	F	N41	518598	2592.99	Rear 15mm	/	26.65	27	0.843	0.91	0.426	0.46	0.04
3	Body	F	N41	509902	2549.51	Rear 15mm	/	26.58	27	0.912	1.00	0.459	0.51	-0.02
3	Body	F	N41	501204	2506.02	Rear 15mm	/	26.33	27	0.73	0.85	0.364	0.42	0.07
3	Body	F	N41	535998	2679.99	Right Edge 15mm	/	26.56	27	0.892	0.99	0.47	0.52	-0.07
3	Body	F	N41	527298	2636.49	Right Edge 15mm	/	26.48	27	0.959	1.08	0.5	0.56	-0.05
3	Body	F	N41	518598	2592.99	Right Edge 15mm	/	26.65	27	0.865	0.94	0.455	0.49	-0.15
3	Body	F	N41	509902	2549.51	Right Edge 15mm	/	26.58	27	1.02	1.12	0.516	0.57	0.15
3	Body	F	N41	501204	2506.02	Right Edge 15mm	/	26.33	27	0.696	0.81	0.354	0.41	-0.07
N41 PC2 DFT-s-OFDM QPSK 30k 20M 25@12														
3	Body	F	N41	518598	2592.99	Rear 15mm	Note2	9.49	10.5	0.025	0.03	0.013	0.02	-0.08
3	Body	F	N41	518598	2592.99	Right Edge 15mm	Note2	9.49	10.5	0.028	0.04	0.014	0.02	0.09
N41 PC2 ANT3 DFT-s-OFDM QPSK 30k 20M 25@12														
3	Body	F	N41	535998	2679.99	Rear 0mm	Note1	11.16	12.5	0.899	1.22	0.297	0.40	0.13
3	Body	F	N41	527298	2636.49	Rear 0mm	Note1/Fig.20	11.15	12.5	0.928	1.27	0.308	0.42	0.09
3	Body	F	N41	518598	2592.99	Rear 0mm	Note1	11.39	12.5	0.869	1.12	0.293	0.38	-0.18
3	Body	F	N41	509902	2549.51	Rear 0mm	Note1	11.26	12.5	0.859	1.14	0.288	0.38	-0.04
3	Body	F	N41	501204	2506.02	Rear 0mm	Note1	11.35	12.5	0.873	1.14	0.293	0.38	-0.1
3	Body	F	N41	518598	2592.99	Right Edge 0mm	Note1	11.39	12.5	0.449	0.58	0.154	0.20	-0.14
3	Body	F	N41	527298	2636.49	Rear 0mm	CP-OFDM 16QAM	11.26	12.5	0.913	1.21	0.291	0.39	0.07
N41 PC2 ANT3 DFT-s-OFDM QPSK 30k 20M 25@12														
3	Body	F	N41	535998	2679.99	Rear 0mm	Note2	9.16	10.5	0.588	0.80	0.196	0.27	-0.09
3	Body	F	N41	527298	2636.49	Rear 0mm	Note2	9.25	10.5	0.607	0.81	0.202	0.27	0.08
3	Body	F	N41	518598	2592.99	Rear 0mm	Note2	9.49	10.5	0.564	0.71	0.191	0.24	-0.15
3	Body	F	N41	509902	2549.51	Rear 0mm	Note2	9.44	10.5	0.581	0.74	0.196	0.25	0.11
3	Body	F	N41	501204	2506.02	Rear 0mm	Note2	9.45	10.5	0.584	0.74	0.199	0.25	0.11
3	Body	F	N41	518598	2592.99	Right Edge 0mm	Note2	9.49	10.5	0.305	0.38	0.103	0.13	0.09
N41 PC2 ANT3 DFT-s-OFDM QPSK 30k 20M 25@12														
3	Body	F	N41	518598	2592.99	Rear 0mm	Note3	7.51	8.5	0.366	0.46	0.121	0.15	-0.12
3	Body	F	N41	518598	2592.99	Right Edge 0mm	Note3	7.51	8.5	0.205	0.26	0.063	0.08	-0.06
N66 DFT-s-OFDM QPSK 15k 5M 12@6														
1	Body	F	N66	349000	1745	Rear 15mm	/	23.99	25	0.609	0.77	0.357	0.45	-0.01
1	Body	F	N66	349000	1745	Right Edge 15mm	/	23.99	25	0.35	0.44	0.221	0.28	-0.13
N66 DFT-s-OFDM QPSK 15k 5M 12@6														
1	Body	F	N66	355500	1777.5	Rear 0mm	Note1	15.37	15.5	1.01	1.04	0.445	0.46	0.15
1	Body	F	N66	349000	1745	Rear 0mm	Note1	15.45	15.5	1.08	1.09	0.473	0.48	0.04
1	Body	F	N66	342500	1712.5	Rear 0mm	Note1/Fig.21	15.44	15.5	1.09	1.11	0.48	0.49	-0.05
1	Body	F	N66	349000	1745	Right Edge 0mm	Note1	15.44	15.5	0.256	0.26	0.103	0.10	0.05
1	Body	F	N66	342500	1712.5	Rear 0mm	CP-OFDM 16QAM	15.46	15.5	1.05	1.06	0.456	0.46	0.09
N66 DFT-s-OFDM QPSK 15k 5M 12@6														
1	Body	F	N66	349000	1745	Rear 0mm	Note2	13.49	13.5	0.651	0.65	0.289	0.29	0.03
1	Body	F	N66	349000	1745	Right Edge 0mm	Note2	13.49	13.5	0.152	0.15	0.064	0.06	0.04
N66 DFT-s-OFDM QPSK 15k 5M 12@6														
1	Body	F	N66	349000	1745	Rear 0mm	Note3	11.3	11.5	0.441	0.46	0.188	0.20	0.12
1	Body	F	N66	349000	1745	Right Edge 0mm	Note3	11.3	11.5	0.098	0.10	0.041	0.04	-0.05

Note1: The results for SA transmit alone.

Note2: The results for SA transmit with WIFI.

Note3: The results for NSA transmit with WIFI.



ANT	Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	Test setup/Position	Note/Fig No.	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 1g (W/kg)	Calculated SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Calculated SAR 10g (W/kg)	Power Drift
N71 DFT-s-OFDM QPSK 15k 5M 12@6														
0	Body	F	N71	136100	680.5	Rear 15mm	/	23.92	25	0.1	0.13	0.073	0.09	-0.09
0	Body	F	N71	136100	680.5	Right Edge 15mm	/	23.92	25	0.056	0.07	0.041	0.05	0.17
0	Body	F	N71	136100	680.5	Bottom Edge 15mm	/	23.92	25	0.114	0.15	0.081	0.10	0.01
N71 DFT-s-OFDM QPSK 15k 5M 12@6														
0	Body	F	N71	139100	695.5	Rear 0mm	Note1	20.76	21	0.943	1.00	0.38	0.40	-0.08
0	Body	F	N71	136100	680.5	Rear 0mm	Note1	20.82	21	0.969	1.01	0.413	0.43	0.06
0	Body	F	N71	133110	665.5	Rear 0mm	Note1	20.79	21	1.09	1.14	0.465	0.49	-0.1
0	Body	F	N71	136100	680.5	Right Edge 0mm	Note1	20.82	21	0.363	0.38	0.175	0.18	-0.07
0	Body	F	N71	139100	695.5	Bottom Edge 0mm	Note1	20.76	21	0.856	0.90	0.347	0.37	-0.11
0	Body	F	N71	136100	680.5	Bottom Edge 0mm	Note1	20.82	21	0.934	0.97	0.357	0.37	0.17
0	Body	F	N71	133110	665.5	Bottom Edge 0mm	Note1/Fig 22	20.79	21	1.32	1.39	0.44	0.46	-0.02
0	Body	F	N71	133110	665.5	Bottom Edge 0mm	CP-OFDM 16QAM	20.9	21	1.28	1.31	0.413	0.42	0.07
N71 DFT-s-OFDM QPSK 15k 5M 12@6														
0	Body	F	N71	136100	680.5	Rear 0mm	Note2	18.88	19	0.505	0.52	0.215	0.22	0.08
0	Body	F	N71	136100	680.5	Right Edge 0mm	Note2	18.88	19	0.3	0.31	0.12	0.12	0.14
0	Body	F	N71	139100	695.5	Bottom Edge 0mm	Note2	18.79	19	0.617	0.65	0.197	0.21	0.14
0	Body	F	N71	136100	680.5	Bottom Edge 0mm	Note2	18.88	19	0.641	0.66	0.21	0.22	-0.15
0	Body	F	N71	133110	665.5	Bottom Edge 0mm	Note2	18.83	19	0.66	0.69	0.235	0.24	0.06
N71 DFT-s-OFDM QPSK 15k 5M 12@6														
0	Body	F	N71	136100	680.5	Rear 0mm	Note3	16.85	17	0.247	0.26	0.116	0.12	0.13
0	Body	F	N71	136100	680.5	Right Edge 0mm	Note3	16.85	17	0.159	0.16	0.067	0.07	0.18
0	Body	F	N71	136100	680.5	Bottom Edge 0mm	Note3	16.85	17	0.411	0.43	0.134	0.14	-0.05
N77 PC2 DFT-s-OFDM QPSK 30k 20M 25@12														
4	Body	F	N77	636000	3540	Rear 15mm	/	26.34	27.5	0.718	0.94	0.337	0.44	-0.03
4	Body	F	N77	633334	3500.01	Rear 15mm	/	26.43	27.5	0.678	0.87	0.321	0.41	-0.15
4	Body	F	N77	630668	3460.02	Rear 15mm	/	26.32	27.5	0.602	0.79	0.272	0.36	0.09
4	Body	F	N77	636000	3540	Right Edge 20mm	/	26.34	27.5	1.01	1.32	0.406	0.53	-0.09
4	Body	F	N77	633334	3500.01	Right Edge 20mm	/	26.43	27.5	0.977	1.25	0.382	0.49	0.12
4	Body	F	N77	630668	3460.02	Right Edge 20mm	/	26.32	27.5	0.853	1.12	0.332	0.44	-0.14
4	Body	F	N77	664666	3969.99	Rear 15mm	/	26.34	27.5	0.7	0.91	0.324	0.42	0.19
4	Body	F	N77	661200	3918	Rear 15mm	/	26.24	27.5	0.696	0.93	0.321	0.43	0.17
4	Body	F	N77	657733	3866	Rear 15mm	/	26.32	27.5	0.64	0.84	0.306	0.40	0.14
4	Body	F	N77	654267	3814	Rear 15mm	/	26.24	27.5	0.597	0.80	0.283	0.38	0.18
4	Body	F	N77	650800	3762	Rear 15mm	/	26.11	27.5	0.646	0.89	0.299	0.41	0.08
4	Body	F	N77	647334	3710.01	Rear 15mm	/	26.23	27.5	0.666	0.89	0.313	0.42	-0.18
4	Body	F	N77	664666	3969.99	Right Edge 20mm	Fig.23	26.34	27.5	1.04	1.36	0.472	0.62	-0.12
4	Body	F	N77	661200	3918	Right Edge 20mm	/	26.24	27.5	0.932	1.25	0.361	0.48	0.07
4	Body	F	N77	657733	3866	Right Edge 20mm	/	26.32	27.5	0.868	1.14	0.353	0.46	-0.1
4	Body	F	N77	654267	3814	Right Edge 20mm	/	26.24	27.5	0.845	1.13	0.34	0.45	0.13
4	Body	F	N77	650800	3762	Right Edge 20mm	/	26.11	27.5	0.823	1.13	0.327	0.45	0.17
4	Body	F	N77	647334	3710.01	Right Edge 20mm	/	26.23	27.5	0.906	1.21	0.362	0.48	0.04
4	Body	F	N77	664666	3969.99	Right Edge 20mm	CP-OFDM QPSK	25.21	26	0.857	1.03	0.451	0.54	0.06
N77 PC2 DFT-s-OFDM QPSK 30k 20M 25@12														
4	Body	F	N77	633334	3500.01	Rear 15mm	Note2	9.39	10	0.019	0.02	0.009	0.01	0.09
4	Body	F	N77	633334	3500.01	Right Edge 15mm	Note2	9.39	10	0.039	0.04	0.016	0.02	-0.07
4	Body	F	N77	664666	3969.99	Rear 15mm	Note2	9.39	10	0.02	0.02	0.009	0.01	-0.15
4	Body	F	N77	664666	3969.99	Right Edge 15mm	Note2	9.39	10	0.045	0.05	0.018	0.02	-0.03
N77 PC2 ANT4 DFT-s-OFDM QPSK 30k 20M 25@12														
4	Body	F	N77	636000	3540	Rear 0mm	Note1	11.19	12	0.6	0.72	0.21	0.25	0.03
4	Body	F	N77	633334	3500.01	Rear 0mm	Note1	11.29	12	0.558	0.66	0.2	0.24	0.01
4	Body	F	N77	630668	3460.02	Rear 0mm	Note1	11.21	12	0.441	0.53	0.169	0.20	0.06
4	Body	F	N77	636000	3540	Right Edge 0mm	Note1	11.19	12	0.519	0.63	0.173	0.21	0.17
4	Body	F	N77	633334	3500.01	Right Edge 0mm	Note1	11.29	12	0.673	0.79	0.182	0.21	0.02
4	Body	F	N77	630668	3460.02	Right Edge 0mm	Note1	11.21	12	0.687	0.82	0.18	0.22	-0.09
4	Body	F	N77	664666	3969.99	Rear 0mm	Note1	11.29	12	0.774	0.91	0.232	0.27	-0.11
4	Body	F	N77	661200	3918	Rear 0mm	Note1	10.95	12	0.758	0.97	0.228	0.29	0.11
4	Body	F	N77	657733	3866	Rear 0mm	Note1	10.78	12	0.798	1.06	0.237	0.31	0.06
4	Body	F	N77	654267	3814	Rear 0mm	Note1	10.87	12	0.692	0.90	0.216	0.28	0.04
4	Body	F	N77	650800	3762	Rear 0mm	Note1	11.04	12	0.662	0.83	0.21	0.26	-0.08
4	Body	F	N77	647334	3710.01	Rear 0mm	Note1	11.07	12	0.72	0.89	0.226	0.28	0.06
4	Body	F	N77	664666	3969.99	Right Edge 0mm	Note1	11.29	12	0.53	0.62	0.159	0.19	-0.07
4	Body	F	N77	661200	3918	Right Edge 0mm	Note1	10.95	12	0.63	0.80	0.16	0.20	0.06
4	Body	F	N77	657733	3866	Right Edge 0mm	Note1	10.78	12	0.574	0.76	0.159	0.21	-0.08
4	Body	F	N77	654267	3814	Right Edge 0mm	Note1	10.87	12	0.656	0.85	0.143	0.19	-0.08
4	Body	F	N77	650800	3762	Right Edge 0mm	Note1	11.04	12	0.797	0.99	0.168	0.21	-0.07
4	Body	F	N77	647334	3710.01	Right Edge 0mm	Note1	11.07	12	0.586	0.73	0.169	0.21	-0.17
N77 PC2 ANT4 DFT-s-OFDM QPSK 30k 20M 25@12														
4	Body	F	N77	636000	3540	Rear 0mm	Note2	9.28	10	0.359	0.42	0.153	0.18	-0.14
4	Body	F	N77	633334	3500.01	Rear 0mm	Note2	9.39	10	0.487	0.56	0.165	0.19	-0.03
4	Body	F	N77	630668	3460.02	Rear 0mm	Note2	9.18	10	0.404	0.49	0.157	0.19	0.12
4	Body	F	N77	636000	3540	Right Edge 0mm	Note2	9.28	10	0.583	0.69	0.137	0.16	-0.07
4	Body	F	N77	633334	3500.01	Right Edge 0mm	Note2	9.39	10	0.62	0.71	0.132	0.15	-0.09
4	Body	F	N77	630668	3460.02	Right Edge 0mm	Note2	9.18	10	0.585	0.71	0.131	0.16	-0.13
4	Body	F	N77	664666	3969.99	Rear 0mm	Note2	9.39	10	0.596	0.69	0.184	0.21	-0.04
4	Body	F	N77	661200	3918	Rear 0mm	Note2	9.01	10	0.576	0.72	0.198	0.25	-0.03
4	Body	F	N77	657733	3866	Rear 0mm	Note2	8.75	10	0.517	0.69	0.189	0.25	-0.11
4	Body	F	N77	654267	3814	Rear 0mm	Note2	8.76	10	0.523	0.70	0.171	0.23	-0.12
4	Body	F	N77	650800	3762	Rear 0mm	Note2	9.12	10	0.596	0.73	0.193	0.24	-0.01
4	Body	F	N77	647334	3710.01	Rear 0mm	Note2	9.17	10	0.601	0.73	0.199	0.24	0.05
4	Body	F	N77	664666	3969.99	Right Edge 0mm	Note2	9.39	10	0.535	0.62	0.121	0.14	-0.04
4	Body	F	N77	661200	3918	Right Edge 0mm	Note2	9.01	10	0.576	0.72	0.132	0.17	0.04
4	Body	F	N77	657733	3866	Right Edge 0mm	Note2	8.75	10	0.603	0.80	0.122	0.16	0.1
4	Body	F	N77	654267	3814	Right Edge 0mm	Note2	8.76	10	0.586	0.78	0.127	0.17	0.08
4	Body	F	N77	650800	3762	Right Edge 0mm	Note2	9.12	10	0.668	0.82	0.142	0.17	-0.05
4	Body	F	N77	647334	3710.01	Right Edge 0mm	Note2	9.17	10	0.599	0.73	0.138	0.17	-0.06

Note1: The results for SA transmit alone.

Note2: The results for SA transmit with WIFI.

Note3: The results for NSA transmit with WIFI.



ANT	Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	Test setup/Position	Note/Fig No.	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 1g (W/kg)	Calculated SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Calculated SAR 10g (W/kg)	Power Drift
N78 PC2 DFT-s-OFDM QPSK 30k 20M25@12 26dB														
4	Body	F	N78	633334	3500.01	Rear 15mm	/	26.27	27	0.579	0.68	0.357	0.42	0.15
4	Body	F	N78	636000	3540	Right Edge 15mm	/	26.22	27	1	1.20	0.471	0.56	0.06
4	Body	F	N78	633334	3500.01	Right Edge 15mm	/	26.27	27	1.04	1.23	0.472	0.56	-0.04
4	Body	F	N78	630668	3460.02	Right Edge 15mm	/	26.23	27	0.818	0.98	0.377	0.45	-0.06
4	Body	F	N78	650000	3750	Rear 15mm	/	26.36	27	0.648	0.75	0.335	0.39	-0.06
4	Body	F	N78	653000	3795	Right Edge 15mm	Fig.24	26.18	27	1.07	1.29	0.497	0.60	0.18
4	Body	F	N78	650000	3750	Right Edge 15mm	/	26.36	27	1.01	1.17	0.458	0.53	-0.12
4	Body	F	N78	647000	3705	Right Edge 15mm	/	26.19	27	1.01	1.22	0.468	0.56	0.11
4	Body	F	N78	653000	3795	Right Edge 15mm	CP-OFDM QPSK	25.25	25.5	0.852	0.90	0.453	0.48	-0.07
N78 PC2 DFT-s-OFDM QPSK 30k 20M25@12 9dB														
4	Body	F	N78	633334	3500.01	Rear 15mm	Note2	9.5	10	0.017	0.02	0.007	0.01	0.16
4	Body	F	N78	633334	3500.01	Right Edge 15mm	Note2	9.5	10	0.037	0.04	0.014	0.02	0.03
4	Body	F	N78	650000	3750	Rear 15mm	Note2	9.37	10	0.019	0.02	0.006	0.01	-0.08
4	Body	F	N78	650000	3750	Right Edge 15mm	Note2	9.37	10	0.03	0.03	0.011	0.01	-0.12
N78 PC2 ANT4 DFT-s-OFDM QPSK 30k 20M25@12 11dB														
4	Body	F	N78	636000	3540	Rear 0mm	Note1	10.92	12	0.424	0.54	0.142	0.18	-0.01
4	Body	F	N78	633334	3500.01	Rear 0mm	Note1	11.15	12	0.384	0.47	0.126	0.15	0.08
4	Body	F	N78	630668	3460.02	Rear 0mm	Note1	11.09	12	0.427	0.53	0.139	0.17	0.1
4	Body	F	N78	636000	3540	Right Edge 0mm	Note1	10.92	12	0.812	1.04	0.182	0.23	-0.04
4	Body	F	N78	633334	3500.01	Right Edge 0mm	Note1	11.15	12	0.657	0.80	0.169	0.21	-0.08
4	Body	F	N78	630668	3460.02	Right Edge 0mm	Note1	11.09	12	0.611	0.75	0.165	0.20	-0.08
4	Body	F	N78	653000	3795	Rear 0mm	Note1	10.83	12	0.655	0.86	0.176	0.23	0.08
4	Body	F	N78	650000	3750	Rear 0mm	Note1	10.87	12	0.447	0.58	0.141	0.18	0.16
4	Body	F	N78	647000	3705	Rear 0mm	Note1	10.82	12	0.46	0.60	0.151	0.20	-0.11
4	Body	F	N78	653000	3795	Right Edge 0mm	Note1	10.83	12	0.617	0.81	0.145	0.19	0.12
4	Body	F	N78	650000	3750	Right Edge 0mm	Note1	10.87	12	0.687	0.89	0.165	0.21	-0.07
4	Body	F	N78	647000	3705	Right Edge 0mm	Note1	10.82	12	0.779	1.02	0.179	0.23	-0.04
N78 PC2 ANT4 DFT-s-OFDM QPSK 30k 20M25@12 9dB														
4	Body	F	N78	633334	3500.01	Rear 0mm	Note2	9.5	10	0.345	0.39	0.14	0.16	0.13
4	Body	F	N78	633334	3500.01	Right Edge 0mm	Note2	9.5	10	0.356	0.40	0.108	0.12	0.03
4	Body	F	N78	650000	3750	Rear 0mm	Note2	9.37	10	0.575	0.66	0.186	0.22	0.07
4	Body	F	N78	653000	3795	Right Edge 0mm	Note2	8.99	10	0.365	0.46	0.103	0.13	0.07
4	Body	F	N78	650000	3750	Right Edge 0mm	Note2	9.37	10	0.617	0.71	0.132	0.15	-0.06
4	Body	F	N78	647000	3705	Right Edge 0mm	Note2	9.32	10	0.462	0.54	0.114	0.13	0.09
N78 PC2 ANT4 DFT-s-OFDM QPSK 30k 20M25@12 7dB														
4	Body	F	N78	633334	3500.01	Rear 0mm	Note3	7.49	8	0.267	0.30	0.076	0.09	0.03
4	Body	F	N78	633334	3500.01	Right Edge 0mm	Note3	7.49	8	0.41	0.46	0.093	0.10	-0.07
4	Body	F	N78	650000	3750	Rear 0mm	Note3	7.59	8	0.341	0.37	0.09	0.10	0.1
4	Body	F	N78	650000	3750	Right Edge 0mm	Note3	7.59	8	0.266	0.29	0.074	0.08	-0.06

Note1: The results for SA transmit alone.

Note2: The results for SA transmit with WIFI.

Note3: The results for NSA transmit with WIFI.

14.3 SAR Evaluation for WIFI

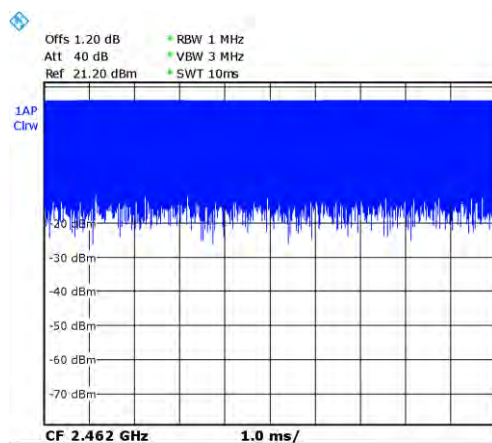
The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures.

When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/g/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, g, n ac then ax) is selected.

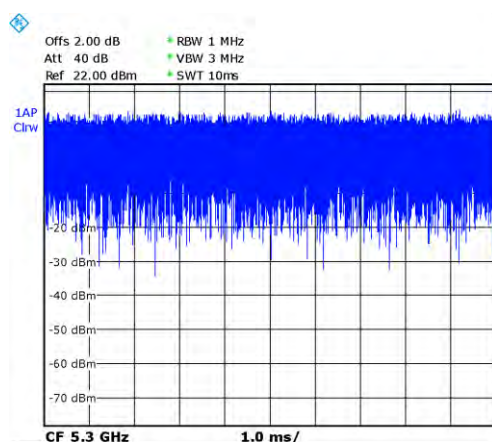
SAR Test reduction was applied from KDB 248227 guidance, when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band. Additional output power measurements were not deemed necessary.

Duty factor plot

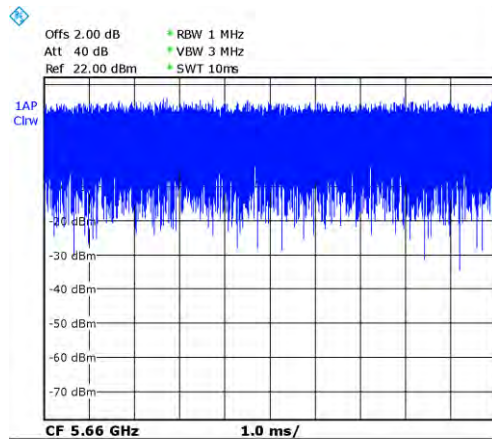
CH6



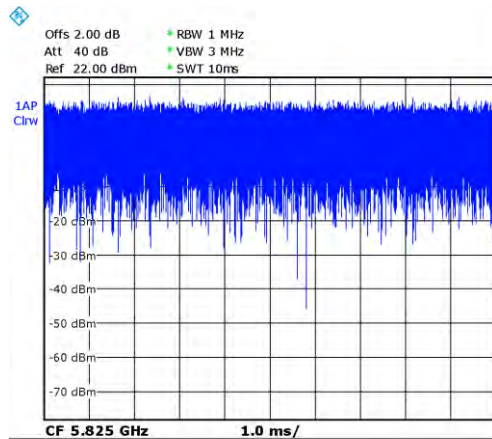
CH60



CH132



CH165



SAR results for WIFI 2.4G

ANT	Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	Test setup/Position	Note/Fig No.	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 1g (W/kg)	Calculated SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Calculated SAR 10g (W/kg)	Power Drift
802.11b 1M20.5dB														
5	Body	F	WIFI2.4G	11	2462	Rear 15mm	/	20.65	22	0.346	0.47	0.187	0.26	0.03
5	Body	F	WIFI2.4G	11	2462	Right Edge 15mm	/	20.65	22	0.139	0.19	0.074	0.10	0.09
5	Body	F	WIFI2.4G	11	2462	Top Edge 15mm	/	20.65	22	0.35	0.48	0.191	0.26	0.07
802.11b 1M 13dB														
5	Body	F	WIFI2.4G	11	2462	Rear 0mm	Note1	12.21	13.5	0.884	1.19	0.356	0.48	-0.09
5	Body	F	WIFI2.4G	6	2437	Rear 0mm	Note1	12.17	13.5	0.786	1.07	0.359	0.49	0.06
5	Body	F	WIFI2.4G	1	2412	Rear 0mm	Note1/Fig 25	12.19	13.5	1.03	1.39	0.427	0.58	0.12
5	Body	F	WIFI2.4G	11	2462	Right Edge 0mm	Note1	12.17	13.5	0.27	0.37	0.093	0.13	-0.14
5	Body	F	WIFI2.4G	11	2462	Top Edge 0mm	Note1	12.21	13.5	0.652	0.88	0.273	0.37	0.1
5	Body	F	WIFI2.4G	6	2437	Top Edge 0mm	Note1	12.17	13.5	0.851	1.16	0.327	0.44	-0.07
5	Body	F	WIFI2.4G	1	2412	Top Edge 0mm	Note1	12.19	13.5	0.791	1.07	0.323	0.44	-0.03
802.11b 1M 11dB														
5	Body	F	WIFI2.4G	11	2462	Rear 0mm	Note2	10.55	11.5	0.617	0.77	0.255	0.32	0.01
5	Body	F	WIFI2.4G	11	2462	Right Edge 0mm	Note2	10.55	11.5	0.202	0.25	0.067	0.08	-0.09
5	Body	F	WIFI2.4G	11	2462	Top Edge 0mm	Note2	10.55	11.5	0.469	0.58	0.2	0.25	-0.12

SAR results for WIFI 5G

ANT	Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	Test setup/Position	Note/Fig No.	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 1g (W/kg)	Calculated SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Calculated SAR 10g (W/kg)	Power Drift
802.11a 6M 19dB														
5	Body	F	WIFI5G	60	5300	Rear 15mm	/	18.74	20	0.265	0.35	0.104	0.14	0.08
5	Body	F	WIFI5G	60	5300	Right Edge 15mm	/	18.74	20	0.152	0.20	0.068	0.09	-0.09
5	Body	F	WIFI5G	60	5300	Top Edge 15mm	/	18.74	20	0.156	0.21	0.071	0.09	-0.04
5	Body	F	WIFI5G	132	5660	Rear 15mm	/	19.29	20	0.307	0.36	0.144	0.17	-0.15
5	Body	F	WIFI5G	132	5660	Right Edge 15mm	/	19.29	20	0.225	0.26	0.096	0.11	-0.18
5	Body	F	WIFI5G	132	5660	Top Edge 15mm	/	19.29	20	0.138	0.16	0.063	0.07	-0.07
5	Body	F	WIFI5G	165	5825	Rear 15mm	/	19.41	20	0.321	0.37	0.13	0.15	0.09
5	Body	F	WIFI5G	165	5825	Right Edge 15mm	/	19.41	20	0.367	0.42	0.148	0.17	0.05
5	Body	F	WIFI5G	165	5825	Top Edge 15mm	/	19.41	20	0.138	0.16	0.06	0.07	0.1
802.11a 6M 12dB														
5	Body	F	WIFI5G	60	5300	Rear 0mm	Note1	11.39	12.5	0.482	0.62	0.149	0.19	0.15
5	Body	F	WIFI5G	60	5300	Right Edge 0mm	Note1	11.39	12.5	0.43	0.56	0.145	0.19	-0.12
5	Body	F	WIFI5G	60	5300	Top Edge 0mm	Note1	11.39	12.5	0.152	0.20	0.062	0.08	0.18
5	Body	F	WIFI5G	132	5660	Rear 0mm	Note1	11.46	12.5	0.737	0.94	0.162	0.21	-0.05
5	Body	F	WIFI5G	136	5680	Rear 0mm	Note1	11.35	12.5	0.703	0.92	0.154	0.20	0.02
5	Body	F	WIFI5G	132	5660	Right Edge 0mm	Note1	11.46	12.5	0.785	1.00	0.18	0.23	-0.06
5	Body	F	WIFI5G	136	5680	Right Edge 0mm	Note1	11.35	12.5	0.747	0.97	0.164	0.21	0.05
5	Body	F	WIFI5G	132	5660	Top Edge 0mm	Note1	11.36	12.5	0.138	0.18	0.038	0.05	-0.12
5	Body	F	WIFI5G	165	5825	Rear 0mm	Note1	11.58	12.5	0.689	0.85	0.16	0.20	-0.12
5	Body	F	WIFI5G	157	5785	Right Edge 0mm	Note1	11.55	12.5	0.825	1.03	0.205	0.26	0.06
5	Body	F	WIFI5G	165	5825	Right Edge 0mm	Note1/Fig 26	11.58	12.5	0.835	1.03	0.214	0.26	0.05
5	Body	F	WIFI5G	165	5825	Top Edge 0mm	Note1	11.58	12.5	0.087	0.11	0.029	0.04	0.08
802.11a 6M 10dB														
5	Body	F	WIFI5G	60	5300	Rear 0mm	Note2	9.49	10.5	0.308	0.39	0.094	0.12	-0.12
5	Body	F	WIFI5G	60	5300	Right Edge 0mm	Note2	9.49	10.5	0.236	0.30	0.073	0.09	-0.07
5	Body	F	WIFI5G	60	5300	Top Edge 0mm	Note2	9.49	10.5	0.094	0.12	0.036	0.05	0.13
5	Body	F	WIFI5G	132	5660	Rear 0mm	Note2	9.43	10.5	0.371	0.47	0.098	0.13	0.05
5	Body	F	WIFI5G	132	5660	Right Edge 0mm	Note2	9.43	10.5	0.431	0.55	0.122	0.16	0.06
5	Body	F	WIFI5G	132	5660	Top Edge 0mm	Note2	9.43	10.5	0.083	0.11	0.027	0.03	-0.05
5	Body	F	WIFI5G	165	5825	Rear 0mm	Note2	9.62	10.5	0.398	0.49	0.116	0.14	0.16
5	Body	F	WIFI5G	165	5825	Right Edge 0mm	Note2	9.62	10.5	0.517	0.63	0.134	0.16	-0.05
5	Body	F	WIFI5G	165	5825	Top Edge 0mm	Note2	9.62	10.5	0.083	0.10	0.028	0.03	-0.04

14.4 SAR Evaluation For BT

ANT	Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	Test setup/Position	Note/Fig No.	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 1g (W/kg)	Calculated SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Calculated SAR 10g (W/kg)	Power Drift
BT 1-DH5														
5	Body	F	BT	39	2441	Rear 15mm	/	10.4	11.5	<0.01	<0.01	<0.01	<0.01	/
5	Body	F	BT	39	2441	Right Edge 15mm	/	10.4	11.5	<0.01	<0.01	<0.01	<0.01	/
5	Body	F	BT	39	2441	Top Edge 15mm	/	10.4	11.5	<0.01	<0.01	<0.01	<0.01	/
5	Body	F	BT	39	2441	Rear 0mm	Fig.27	10.4	11.5	0.348	0.45	0.142	0.18	0.12
5	Body	F	BT	39	2441	Right Edge 0mm	/	10.4	11.5	0.102	0.13	0.036	0.05	0.09
5	Body	F	BT	39	2441	Top Edge 0mm	/	10.4	11.5	0.284	0.37	0.113	0.15	-0.11

15 SAR Measurement Variability

SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium.

The following procedures are applied to determine if repeated measurements are required.

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg ($\sim 10\%$ from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20

Band	Frequency		Test Position	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
	Ch.	MHz					
GSM850	190	836.6	GPRS(4) Rear 0mm	0.932	0.912	1.02	/
GSM850	190	836.6	GPRS(4) Rear 0mm	1.12	1.08	1.04	/
GSM1900	661	1880	GPRS(4) Rear 0mm	0.961	0.937	1.03	/
WCDMA B2	9262	1852.4	RMC Rear 0mm	0.954	0.925	1.03	/
WCDMA B4	1412	1732.5	RMC Rear 0mm	0.978	0.956	1.02	/
LTE B2	18900	1880	1RB-Mid Rear 0mm	1.12	1.11	1.01	/
LTE B13	23230	782	1RB-Low Bottom 0mm	1.06	1.03	1.03	/
LTE B25	26365	1882.5	1RB-Middle Rear 0mm	1.04	1.01	1.03	/
LTE B26	26765	821.5	1RB-Mid Bottom 0mm	0.871	0.851	1.02	/
LTE B41 PC2	41055	2636.5	1RB-Middle Rear 0mm	0.852	0.833	1.02	/
LTE B66	132572	1770	1RB-Middle Rear 0mm	1.04	1.02	1.02	/
LTE B71	133322	683	1RB-Middle Rear 0mm	0.859	0.824	1.04	/
LTE B71	133222	673	1RB-Mid Bottom 0mm	1.04	1.03	1.01	/
n25	370500	1852.5	Rear 0mm	1.12	1.07	1.05	/
n41	527298	2636.49	Rear 15mm	1.01	0.958	1.05	/
n41	509902	2549.51	Right 15mm	1.02	1.01	1.01	/
n41	527298	2636.49	Rear 0mm	0.928	0.917	1.01	/
n66	342500	1712.5	Rear 0mm	1.09	1.06	1.03	/
n71	133110	665.5	Rear 0mm	1.09	1.07	1.02	/
n71	133110	665.5	Bottom 0mm	1.32	1.27	1.04	/
n77	664666	3969.99	Right 20mm	1.04	1.01	1.03	/
n78	653000	3795	Right 15mm	1.07	1.03	1.04	/
n78	636000	3540	Right 0mm	0.812	0.789	1.03	/
WIFI2.4G	1	2412	Rear 0mm	1.03	0.964	1.07	/
WIFI5G	165	5825	Right 0mm	0.835	0.801	1.04	/

16 Measurement Uncertainty

16.1 Measurement Uncertainty for Normal SAR Tests (300MHz~3GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	6.0	N	1	1	1	6.0	6.0	∞
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
3	Boundary effect	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
5	Detection limit	B	1.0	N	1	1	1	0.6	0.6	∞
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RF ambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	∞
11	Probe positioned mech. restrictions	B	0.4	R	$\sqrt{3}$	1	1	0.2	0.2	∞
12	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞
13	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
Test sample related										
14	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
15	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
16	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
17	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
18	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
19	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
20	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
21	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521

Combined standard uncertainty	$u_c' = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$							9.55	9.43	257
Expanded uncertainty (confidence interval of 95 %)	$u_e = 2u_c$							19.1	18.9	

16.2 Measurement Uncertainty for Normal SAR Tests (3~6GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	6.55	N	1	1	1	6.55	6.55	∞
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
3	Boundary effect	B	2.0	R	$\sqrt{3}$	1	1	1.2	1.2	∞
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
5	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RFambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	∞
11	Probe positioned mech. restrictions	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
12	Probe positioning with respect to phantom shell	B	6.7	R	$\sqrt{3}$	1	1	3.9	3.9	∞
13	Post-processing	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
Test sample related										
14	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
15	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
16	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
17	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
18	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
19	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
20	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞

21	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
Combined standard uncertainty		$u'_c = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$						10.7	10.6	257
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$						21.4	21.1	

16.3 Measurement Uncertainty for Fast SAR Tests (300MHz~3GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	6.0	N	1	1	1	6.0	6.0	∞
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
3	Boundary effect	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
5	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RFambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	∞
11	Probe positioned mech. Restrictions	B	0.4	R	$\sqrt{3}$	1	1	0.2	0.2	∞
12	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞
13	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
14	Fast SAR z-Approximation	B	7.0	R	$\sqrt{3}$	1	1	4.0	4.0	∞
Test sample related										
15	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
16	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
17	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
18	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
19	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞

20	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
21	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
22	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
Combined standard uncertainty		$u'_c = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$						10.4	10.3	257
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$						20.8	20.6	

16.4 Measurement Uncertainty for Fast SAR Tests (3~6GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	6.55	N	1	1	1	6.55	6.55	∞
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
3	Boundary effect	B	2.0	R	$\sqrt{3}$	1	1	1.2	1.2	∞
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
5	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RFambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	∞
11	Probe positioned mech. Restrictions	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
12	Probe positioning with respect to phantom shell	B	6.7	R	$\sqrt{3}$	1	1	3.9	3.9	∞
13	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
14	Fast SAR z-Approximation	B	14.0	R	$\sqrt{3}$	1	1	8.1	8.1	∞
Test sample related										
15	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
16	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5

17	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
18	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
19	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
20	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
21	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
22	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
Combined standard uncertainty		$u_c = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$						13.5	13.4	257
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$						27.0	26.8	

17 MAIN TEST INSTRUMENTS

Table 17.1: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	E5071C	MY46110673	January 10, 2023	One year
02	Power sensor	NRP110T	101139	January 13, 2023	One year
03	Power sensor	NRP110T	101159	January 13, 2023	One year
04	Signal Generator	E4438C	MY49071430	January 19, 2023	One year
05	Amplifier	60S1G4	0331848	No Calibration Requested	
06	BTS	CMW500	159890	January 12, 2023	One year
07	E-field Probe	SPEAG EX3DV4	7548	August 1, 2022	One year
08	DAE	SPEAG DAE4	1331	September 15, 2022	One year
09	Dipole Validation Kit	SPEAG D750V3	1017	July 20,,2022	One year
10	Dipole Validation Kit	SPEAG D900V2	1d051	July 26,,2022	One year
11	Dipole Validation Kit	SPEAG D1800V2	2d145	July 18,,2022	One year
12	Dipole Validation Kit	SPEAG D1900V2	5d101	July 26,2022	One year
13	Dipole Validation Kit	SPEAG D2450V2	853	July 20,2022	One year
14	Dipole Validation Kit	SPEAG D2600V2	1012	July 20,2022	One year
15	Dipole Validation Kit	SPEAG D3300V2	1011	July 1,2022	One year
16	Dipole Validation Kit	SPEAG D3500V2	1016	July 1,2022	One year
17	Dipole Validation Kit	SPEAG D3700V2	1004	July 1,2022	One year
18	Dipole Validation Kit	SPEAG D3900V2	1024	July 1,2022	One year
19	Dipole Validation Kit	SPEAG D5GHzV2	1060	July 5,2022	One year

END OF REPORT BODY

ANNEX A Graph Results

GSM850 Body

Date: 5/19/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.933$ S/m; $\epsilon_r = 40.61$; $\rho = 1000$ kg/m³

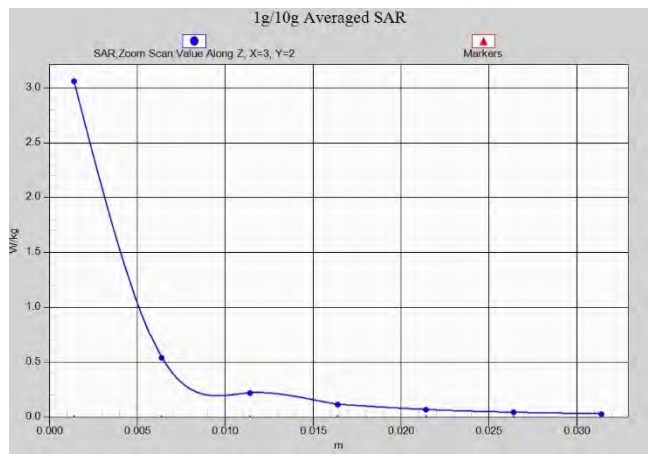
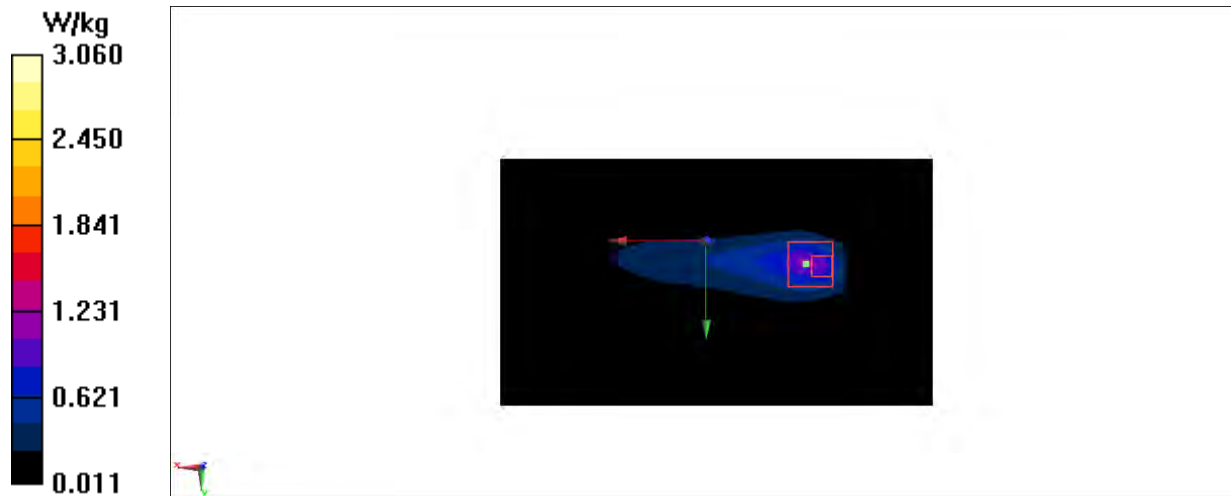
Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM850 4TX 836.6 MHz Duty Cycle: 1:1.99986

Probe: EX3DV4 - SN7548 ConvF(10.30, 10.30, 10.30)

Area Scan (141x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Maximum value of SAR (interpolated) = 1.10 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 14.95 V/m; Power Drift = -0.03 dB
 Peak SAR (extrapolated) = 5.40 W/kg
SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.434 W/kg
 Maximum value of SAR (measured) = 3.06 W/kg



GSM1900 Body

Date: 5/25/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.339$ S/m; $\epsilon_r = 40.293$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM1900 4TX (0) 1880 MHz Duty Cycle: 1:1.99986

Probe: EX3DV4 - SN7548 ConvF(7.80, 7.80, 7.80)

Area Scan (161x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.72 W/kg

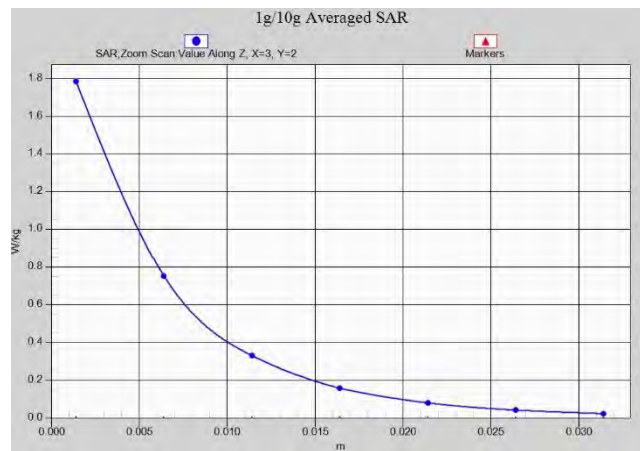
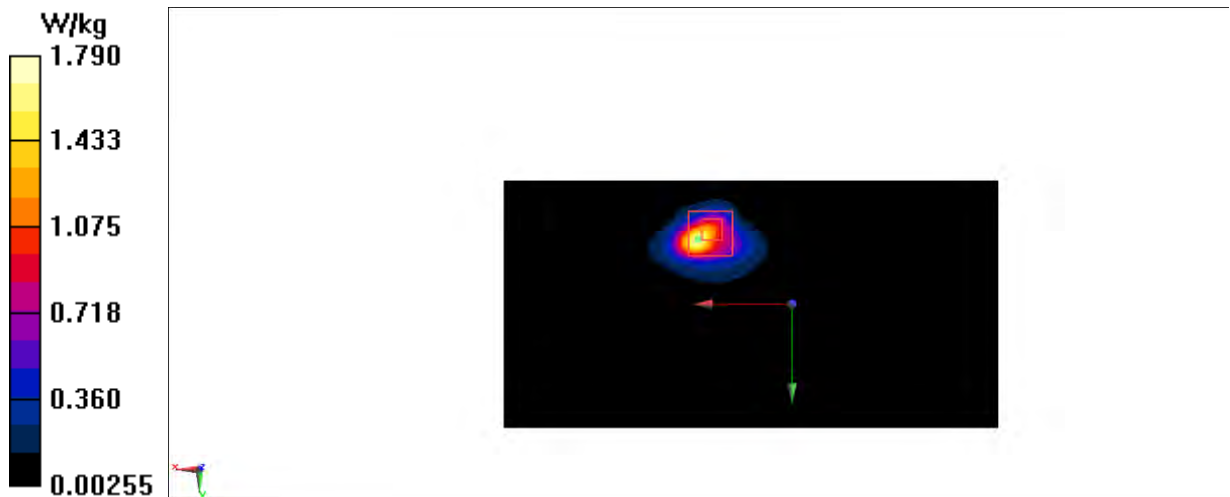
Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.930 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 2.49 W/kg

SAR(1 g) = 0.961 W/kg; SAR(10 g) = 0.406 W/kg

Maximum value of SAR (measured) = 1.79 W/kg



WCDMA1900 Body

Date: 5/25/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used : $f = 1852.4$ MHz; $\sigma = 1.319$ S/m; $\epsilon_r = 40.32$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: UID 0, WCDMA 1900 (0) 1852.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.80, 7.80, 7.80)

Area Scan (141x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.21 W/kg

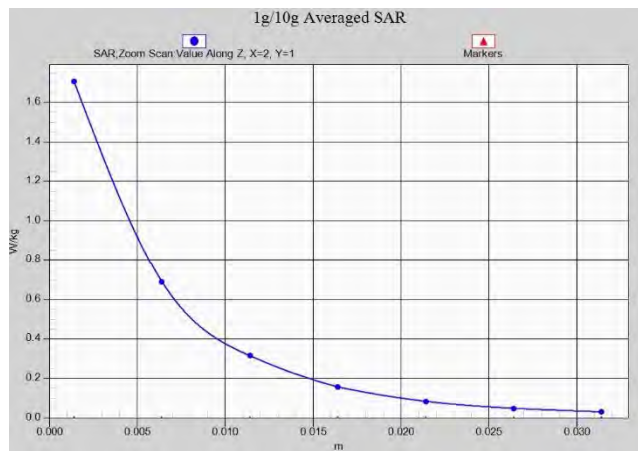
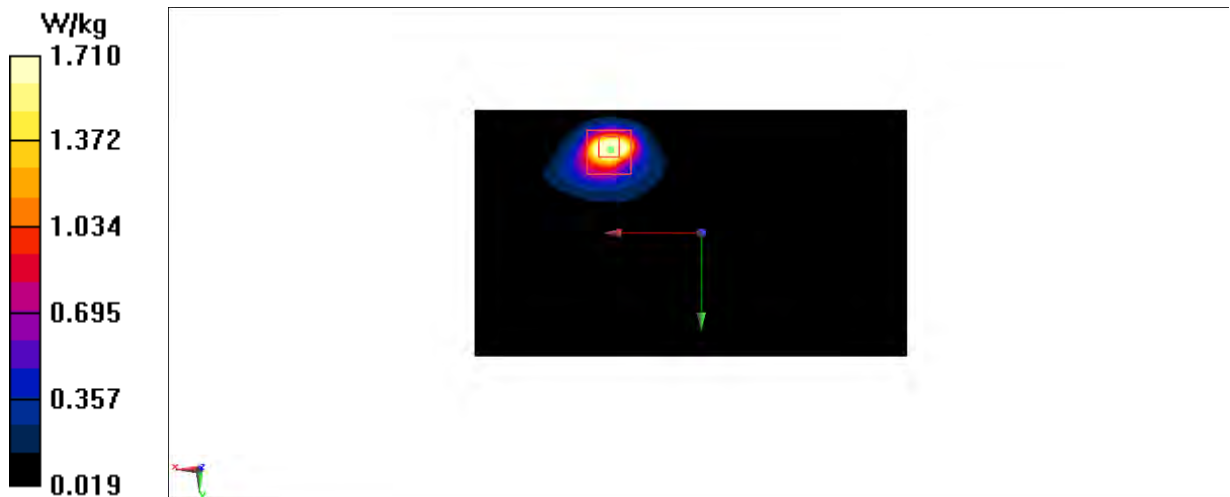
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.382 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 2.52 W/kg

SAR(1 g) = 0.954 W/kg; SAR(10 g) = 0.415 W/kg

Maximum value of SAR (measured) = 1.71 W/kg



WCDMA1700 Body

Date: 5/21/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used : $f=1732.4$ MHz; $\sigma = 1.223$ S/m; $\epsilon_r = 40.305$; $\rho = 1000$ kg/m³

Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1700 Band4 1732.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(8.13, 8.13, 8.13)

Area Scan (141x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.60 W/kg

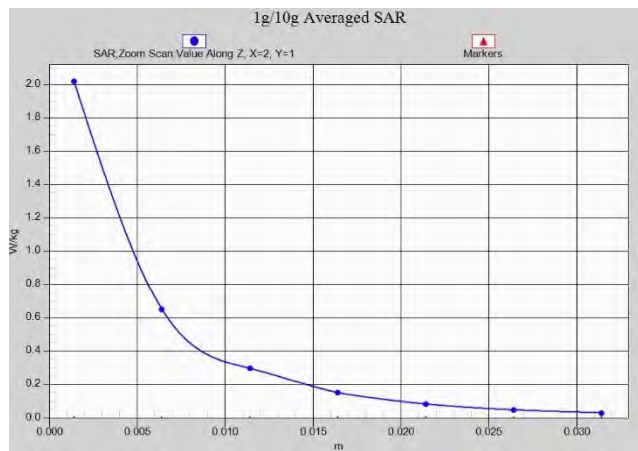
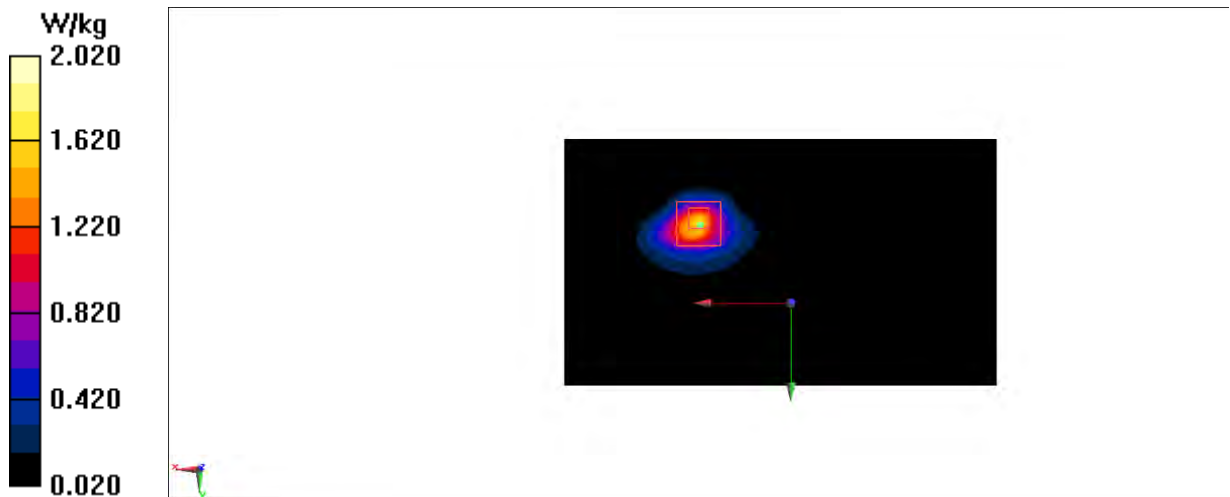
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.579 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 2.92 W/kg

SAR(1 g) = 0.978 W/kg; SAR(10 g) = 0.420 W/kg

Maximum value of SAR (measured) = 2.02 W/kg



WCDMA850 Body

Date: 5/19/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used: $f = 826.4$ MHz; $\sigma = 0.927$ S/m; $\epsilon_r = 40.61$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: WCDMA 850 (0) 826.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(10.30, 10.30, 10.30)

Area Scan (141x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.15 W/kg

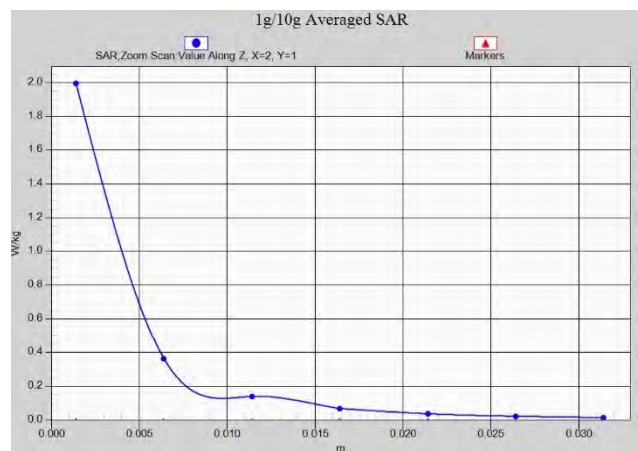
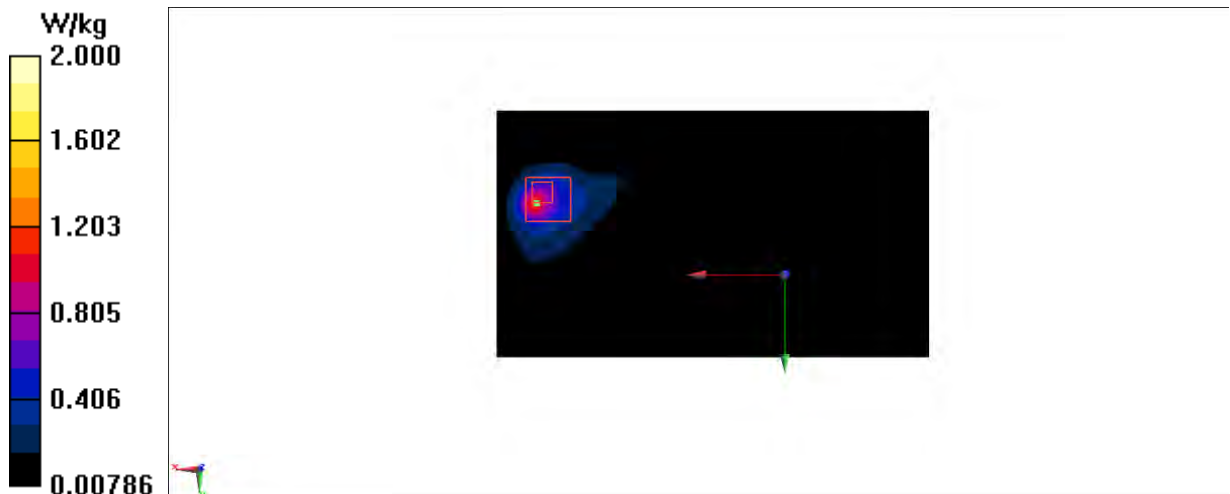
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 0 V/m; Power Drift = 0.09dB

Peak SAR (extrapolated) = 3.41 W/kg

SAR(1 g) = 0.695 W/kg; SAR(10 g) = 0.263 W/kg

Maximum value of SAR (measured) = 2.00 W/kg



LTE B2 Body

Date: 5/26/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.339$ S/m; $\epsilon_r = 40.293$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band2(20MB) 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.80, 7.80, 7.80)

Area Scan (181x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.82 W/kg

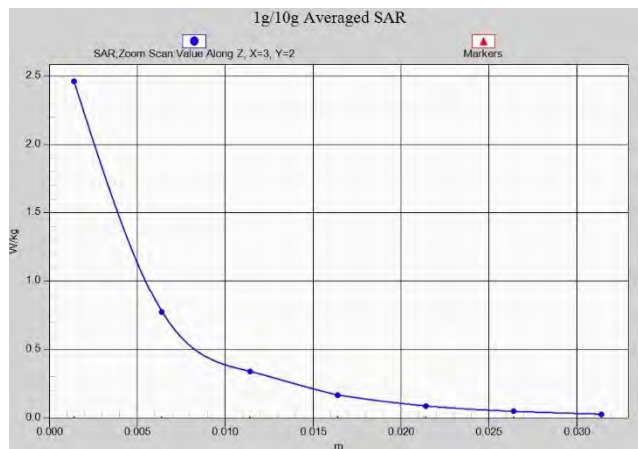
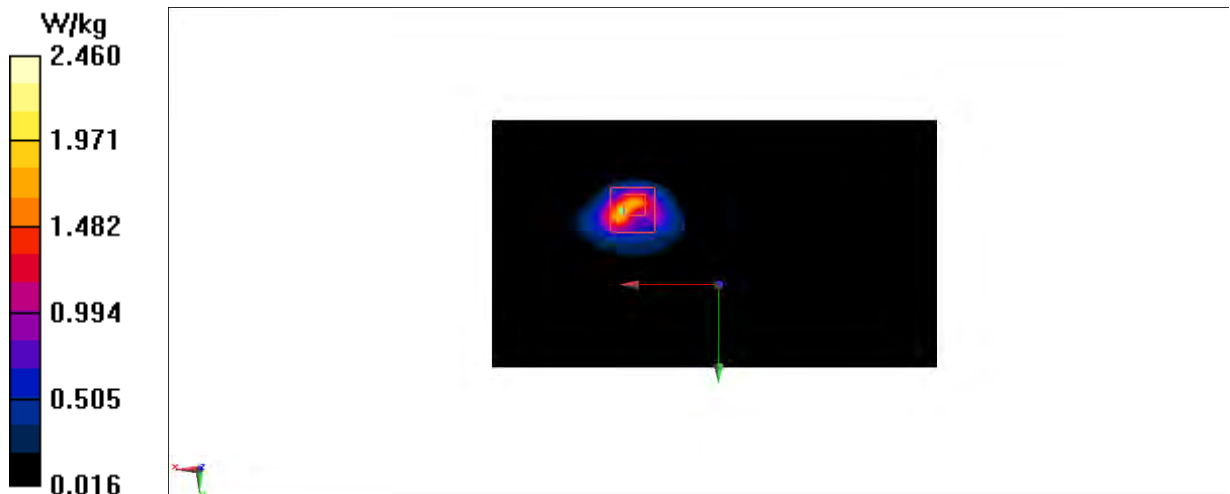
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.399 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.47 W/kg

SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.462 W/kg

Maximum value of SAR (measured) = 2.46 W/kg



LTE B7 Body

Date: 6/2/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.948$ S/m; $\epsilon_r = 38.496$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band7-20M 2560 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.12, 7.12, 7.12)

Area Scan (181x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.25 W/kg

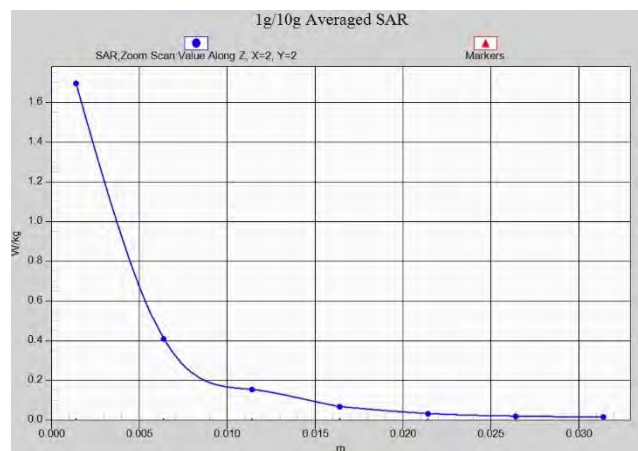
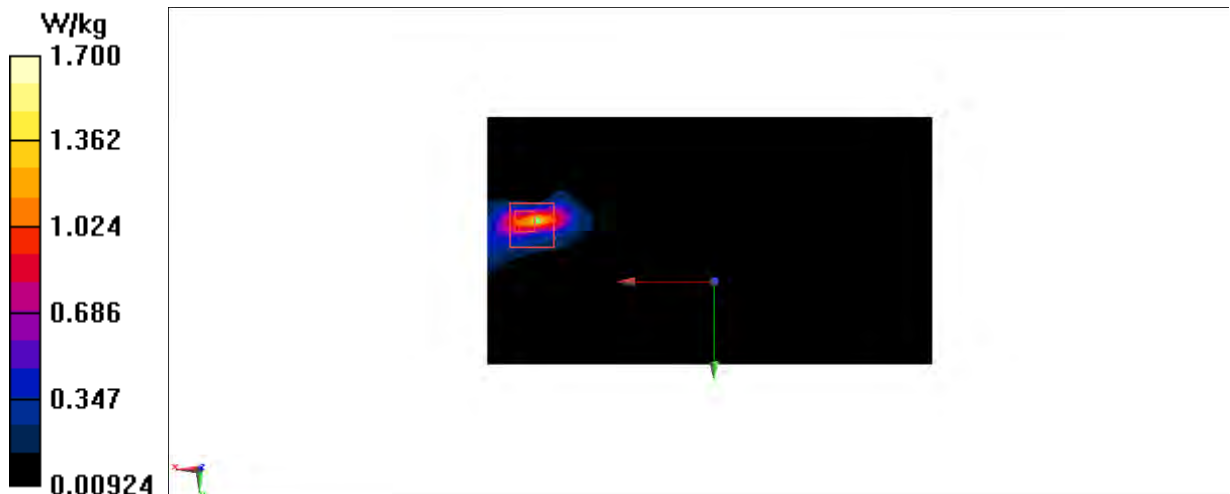
Zoom Scan (8x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.942 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 2.63 W/kg

SAR(1 g) = 0.603 W/kg; SAR(10 g) = 0.221 W/kg

Maximum value of SAR (measured) = 1.70 W/kg



LTE B12 Body

Date: 6/10/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used : $f = 711 \text{ MHz}$; $\sigma = 0.892 \text{ S/m}$; $\epsilon_r = 40.793$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band12 (0) 711 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(10.30, 10.30, 10.30)

Area Scan (161x51x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 2.10 W/kg

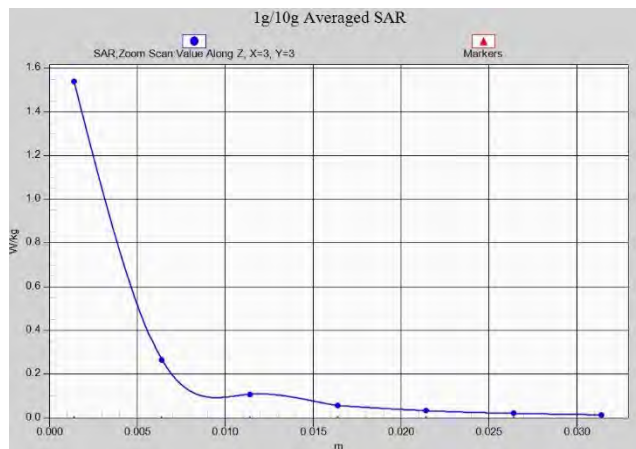
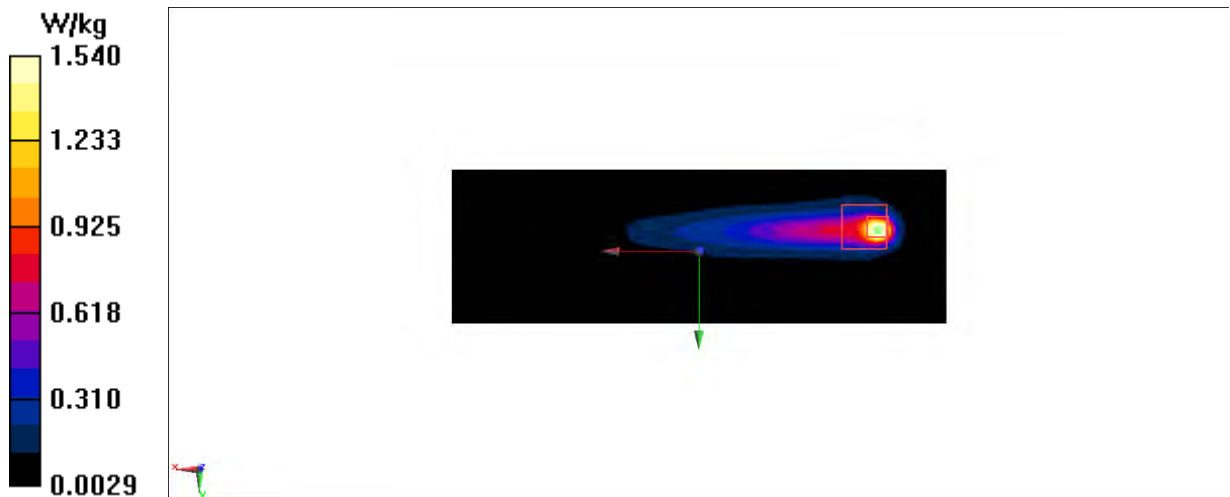
Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.64 V/m ; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.00 W/kg

SAR(1 g) = 0.578 W/kg ; SAR(10 g) = 0.205 W/kg

Maximum value of SAR (measured) = 1.54 W/kg



LTE B13 Body

Date: 6/10/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used : $f = 782 \text{ MHz}$; $\sigma = 0.919 \text{ S/m}$; $\epsilon_r = 40.609$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band13 782 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(10.30, 10.30, 10.30)

Area Scan (141x81x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 2.75 W/kg

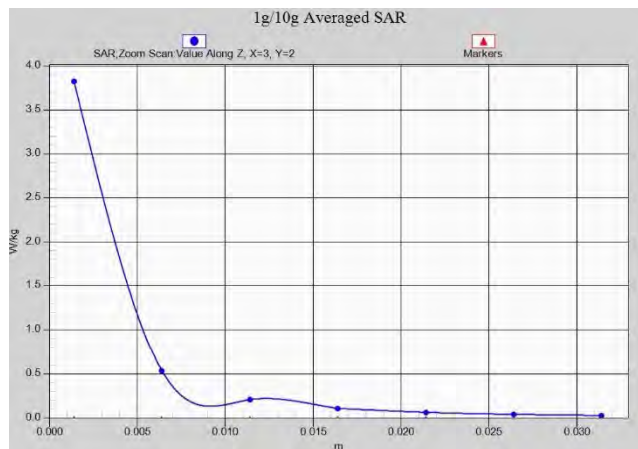
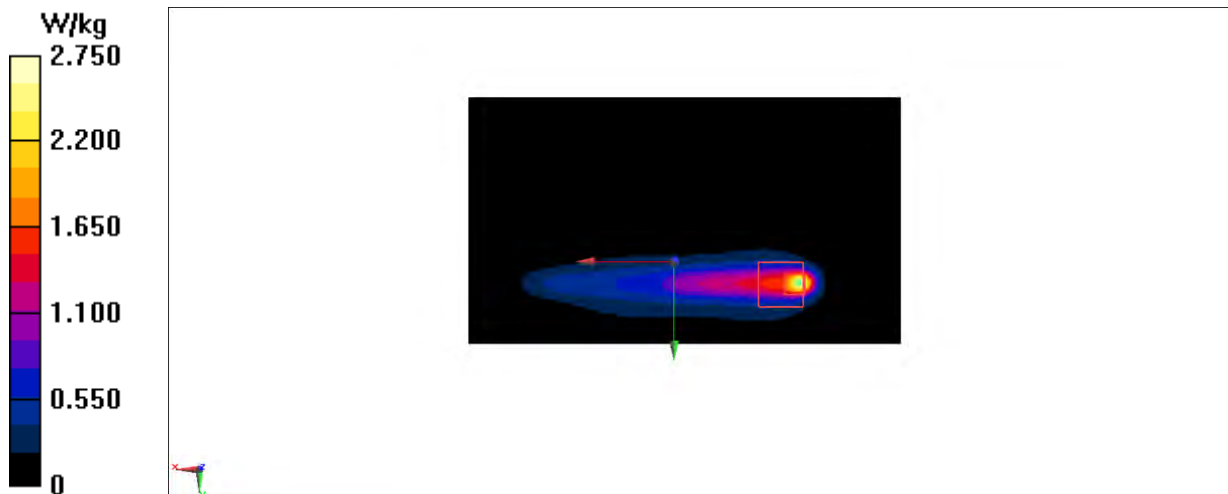
Zoom Scan (6x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.62 V/m ; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 6.64 W/kg

SAR(1 g) = 1.06 W/kg ; SAR(10 g) = 0.379 W/kg

Maximum value of SAR (measured) = 3.83 W/kg



LTE B25 Body

Date: 5/26/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used : $f=1882.5$ MHz; $\sigma=1.341$ S/m; $\epsilon_r = 40.284$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band25 1882.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.80, 7.80, 7.80)

Area Scan (131x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.73 W/kg

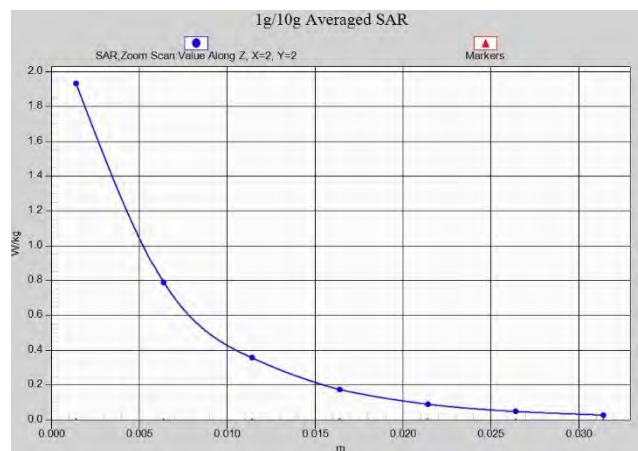
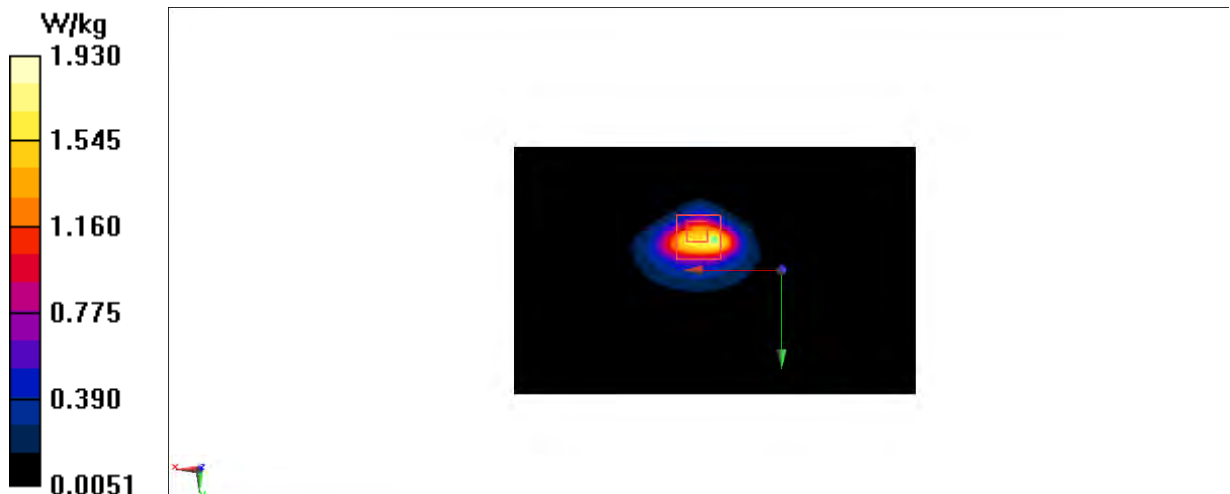
Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.099 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 2.67 W/kg

SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.461 W/kg

Maximum value of SAR (measured) = 1.93 W/kg



LTE B26 Body

Date: 5/19/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used : $f = 821.5 \text{ MHz}$; $\sigma = 0.925 \text{ S/m}$; $\epsilon_r = 40.608$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band26 (0) 821.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(10.30, 10.30, 10.30)

Area Scan (131x51x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.37 W/kg

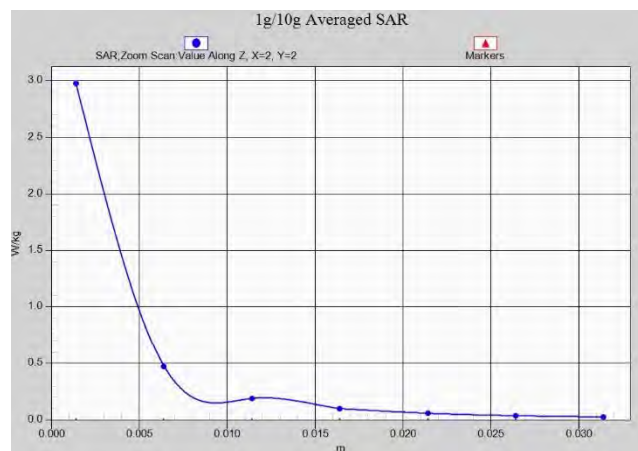
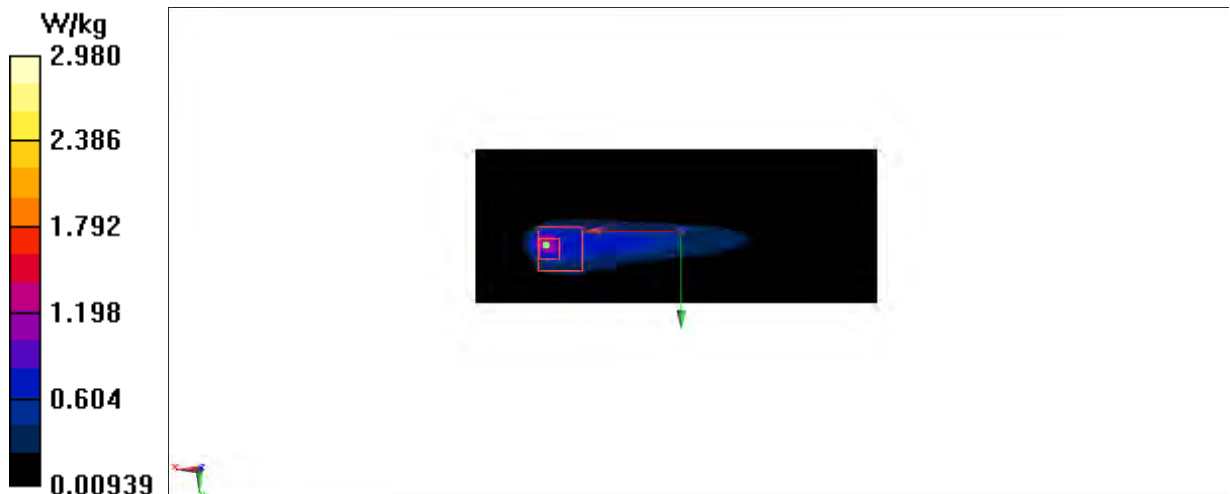
Zoom Scan (6x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 14.03 V/m ; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 4.96 W/kg

SAR(1 g) = 0.871 W/kg ; SAR(10 g) = 0.298 W/kg

Maximum value of SAR (measured) = 2.98 W/kg



LTE B41 PC3 Body

Date: 6/2/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used: $f = 2636.5 \text{ MHz}$; $\sigma = 2.019 \text{ S/m}$; $\epsilon_r = 38.366$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band41 PC3 2636.5 MHz Duty Cycle: 1:1.5787

Probe: EX3DV4 - SN7548 ConvF(7.12, 7.12, 7.12)

Area Scan (181x101x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$

Maximum value of SAR (interpolated) = 1.64 W/kg

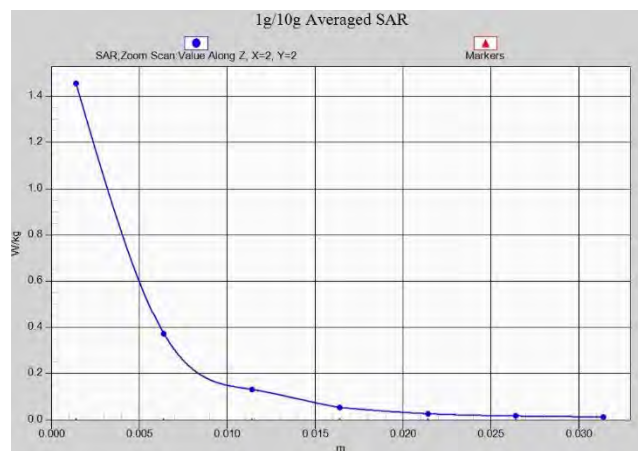
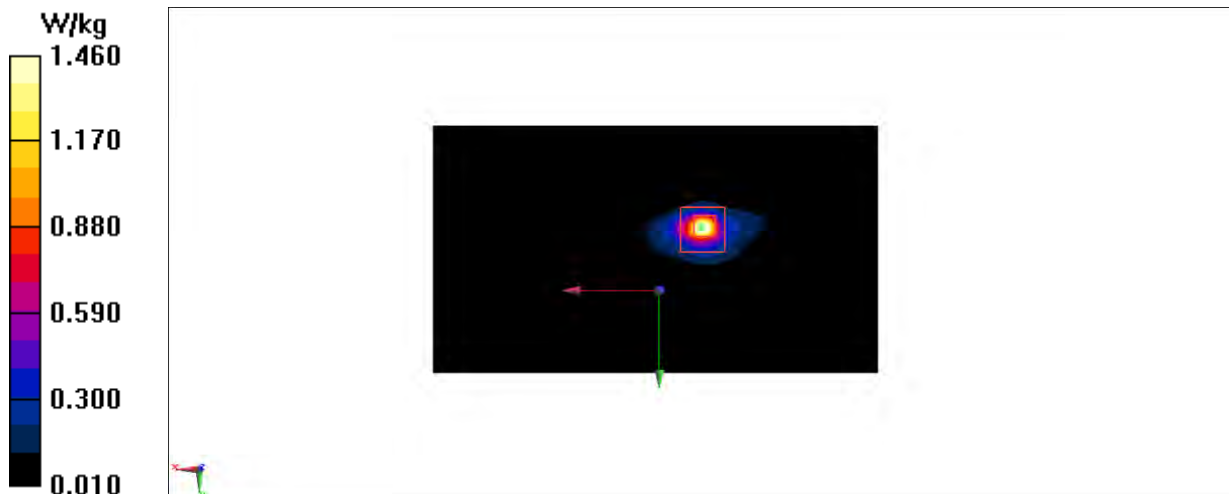
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.047 V/m ; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 2.41 W/kg

SAR(1 g) = 0.641 W/kg ; SAR(10 g) = 0.217 W/kg

Maximum value of SAR (measured) = 1.46 W/kg



LTE B41 PC2 Body

Date: 6/2/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used: $f = 2636.5 \text{ MHz}$; $\sigma = 2.019 \text{ S/m}$; $\epsilon_r = 38.366$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band41 PC2 2636.5 MHz Duty Cycle: 1:1.5787

Probe: EX3DV4 - SN7548 ConvF(7.12, 7.12, 7.12)

Area Scan (181x101x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$

Maximum value of SAR (interpolated) = 2.14 W/kg

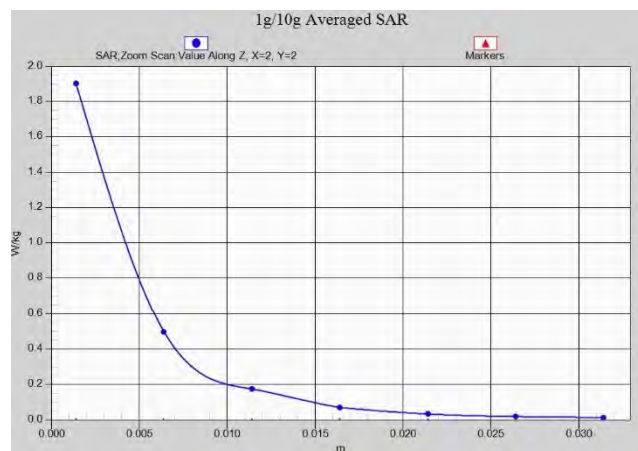
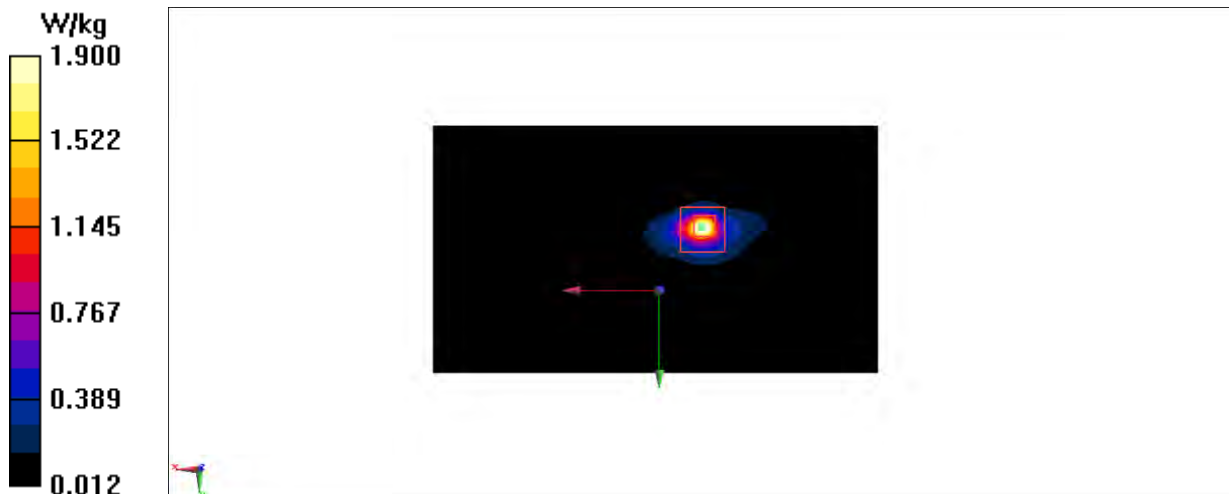
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.884 V/m ; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 3.15 W/kg

SAR(1 g) = 0.852 W/kg ; SAR(10 g) = 0.289 W/kg

Maximum value of SAR (measured) = 1.90 W/kg



LTE B66 Body

Date: 5/21/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used: $f = 1770$ MHz; $\sigma = 1.352$ S/m; $\epsilon_r = 40.294$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band66 (0) 1770 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(8.13, 8.13, 8.13)

Area Scan (131x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.80 W/kg

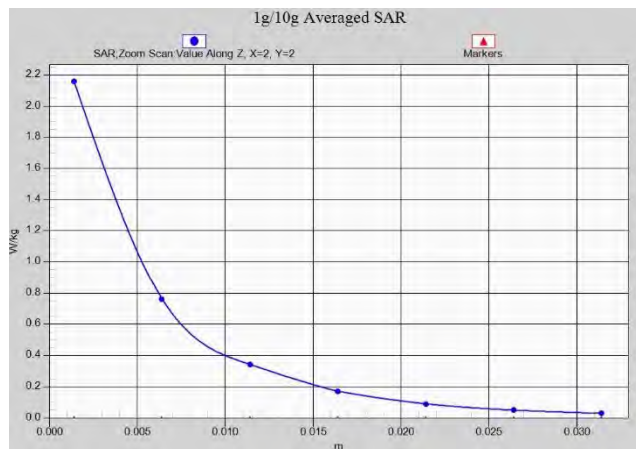
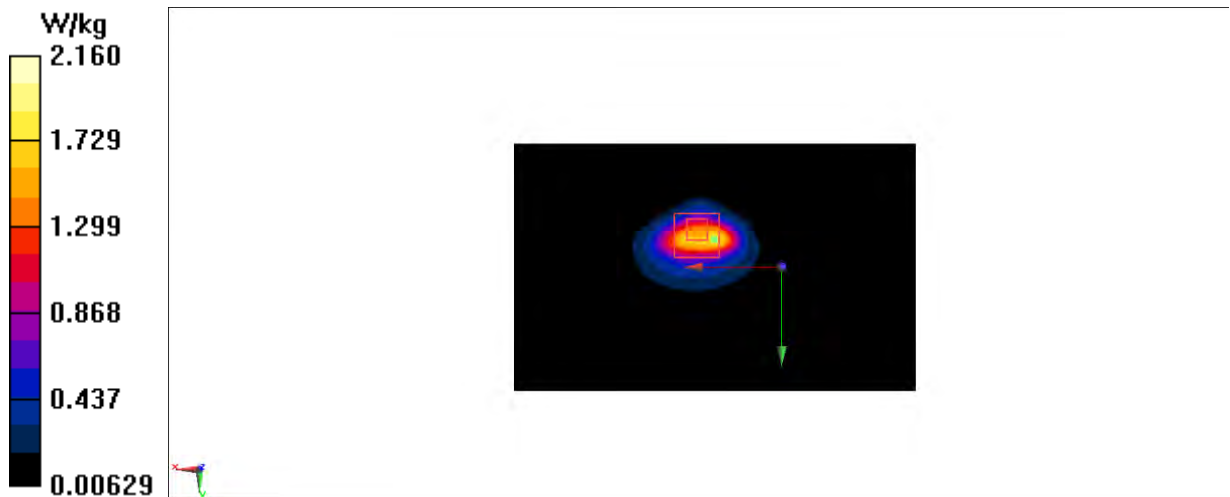
Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.720 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 2.92 W/kg

SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.470 W/kg

Maximum value of SAR (measured) = 2.16 W/kg



LTE B71 Body

Date: 6/10/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used : $f = 673 \text{ MHz}$; $\sigma = 0.88 \text{ S/m}$; $\epsilon_r = 40.945$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band71 (0) 673 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(10.30, 10.30, 10.30)

Area Scan (161x51x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 3.94 W/kg

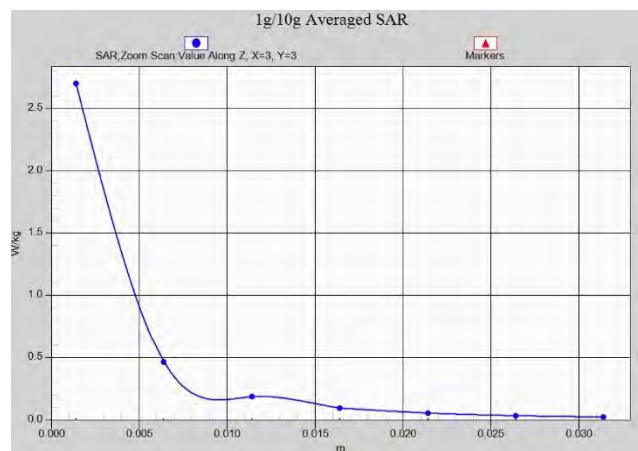
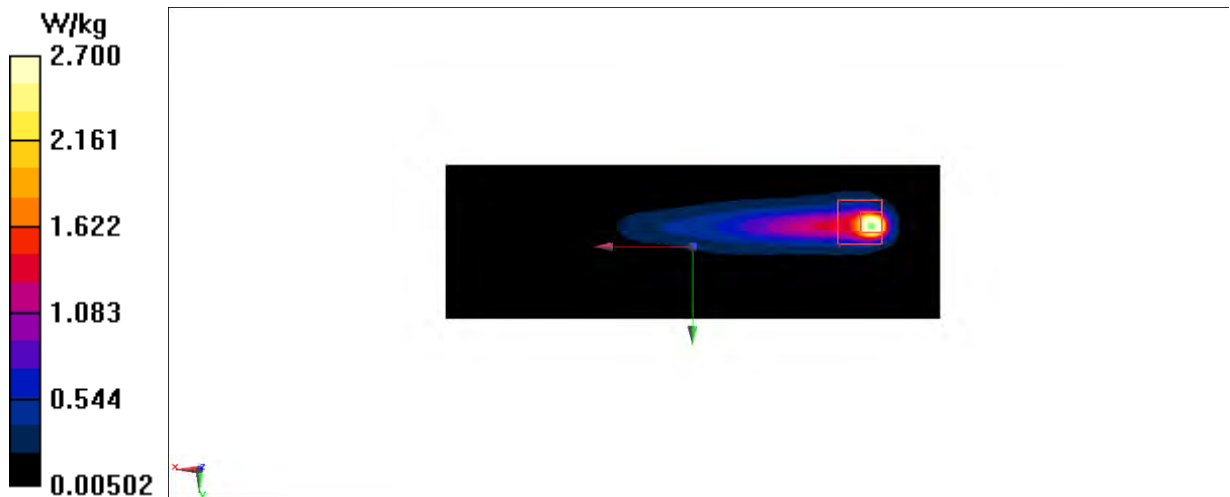
Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.67 V/m ; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 5.51 W/kg

SAR(1 g) = 1.04 W/kg ; SAR(10 g) = 0.361 W/kg

Maximum value of SAR (measured) = 2.70 W/kg



LTE B2 ENDC Body

Date: 5/28/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.367$ S/m; $\epsilon_r = 39.844$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band2(20MB) 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.80, 7.80, 7.80)

Area Scan (141x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.42 W/kg

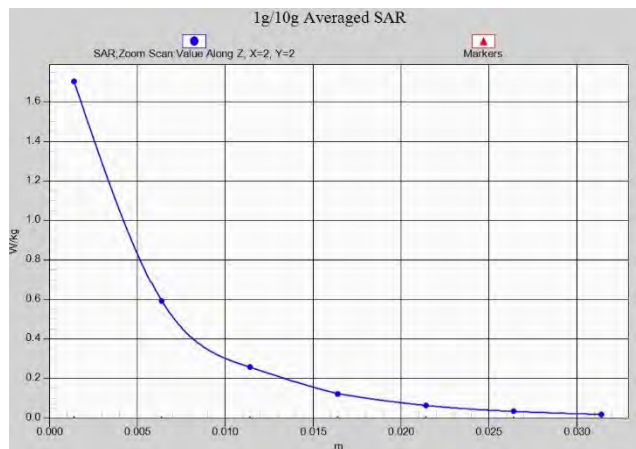
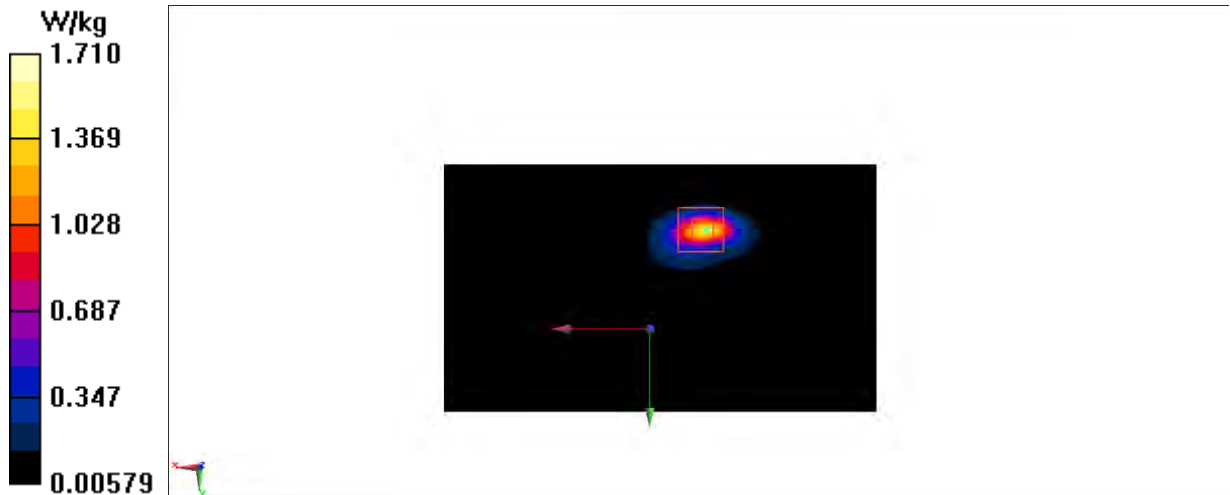
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.288 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 2.11 W/kg

SAR(1 g) = 0.761 W/kg; SAR(10 g) = 0.295 W/kg

Maximum value of SAR (measured) = 1.71 W/kg



LTE B66 ENDC Body

Date: 5/23/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used: $f = 1745 \text{ MHz}$; $\sigma = 1.35 \text{ S/m}$; $\epsilon_r = 39.656$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band66 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(8.13, 8.13, 8.13)

Area Scan (141x81x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.12 W/kg

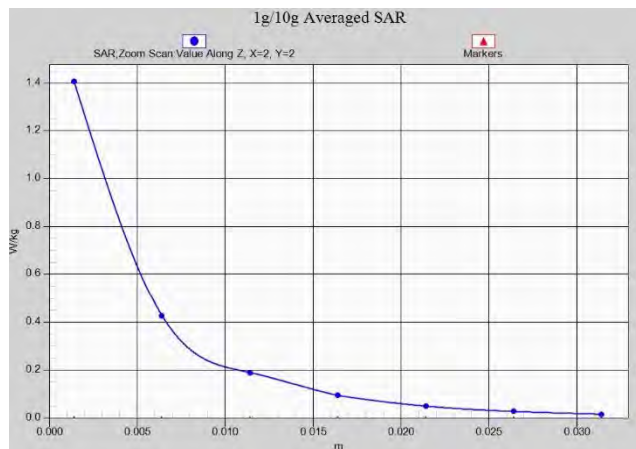
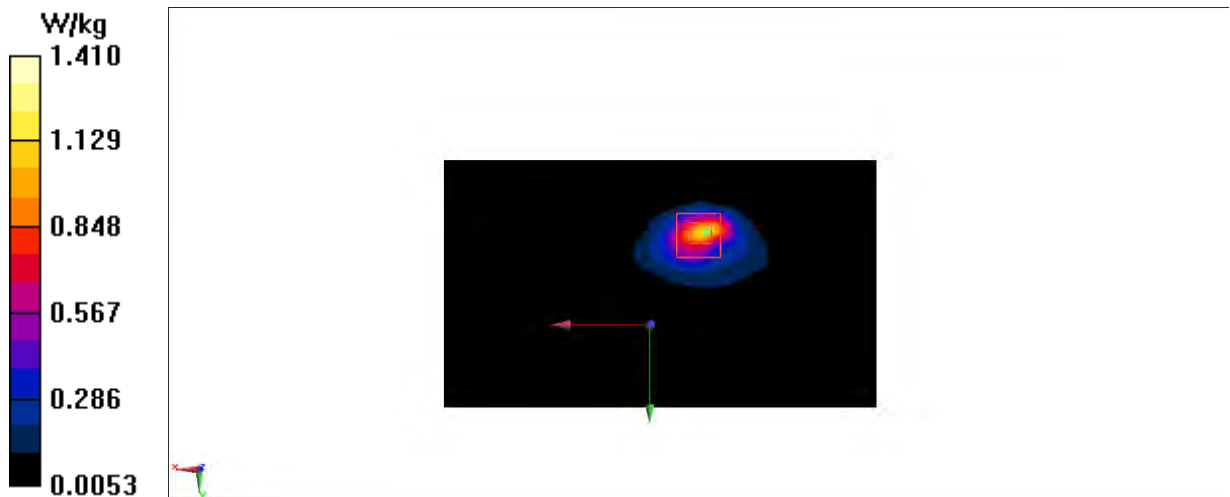
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 1.862 V/m ; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.91 W/kg

SAR(1 g) = 0.647 W/kg ; SAR(10 g) = 0.273 W/kg

Maximum value of SAR (measured) = 1.41 W/kg



N7 Body

Date: 6/4/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used: $f = 2535$ MHz; $\sigma = 1.947$ S/m; $\epsilon_r = 40.125$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G n7 (0) 2535 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.12, 7.12, 7.12)

Area Scan (181x61x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.11 W/kg

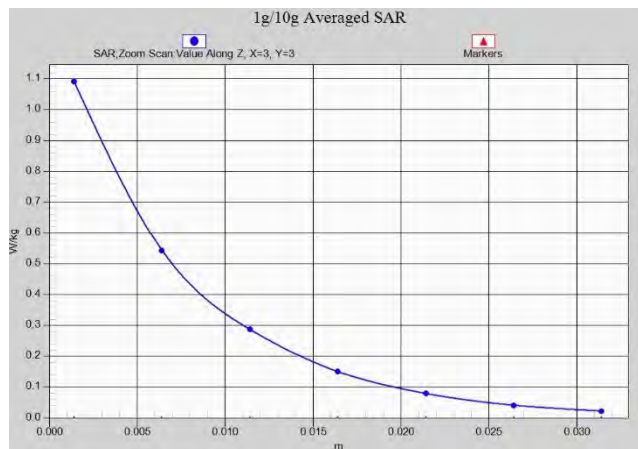
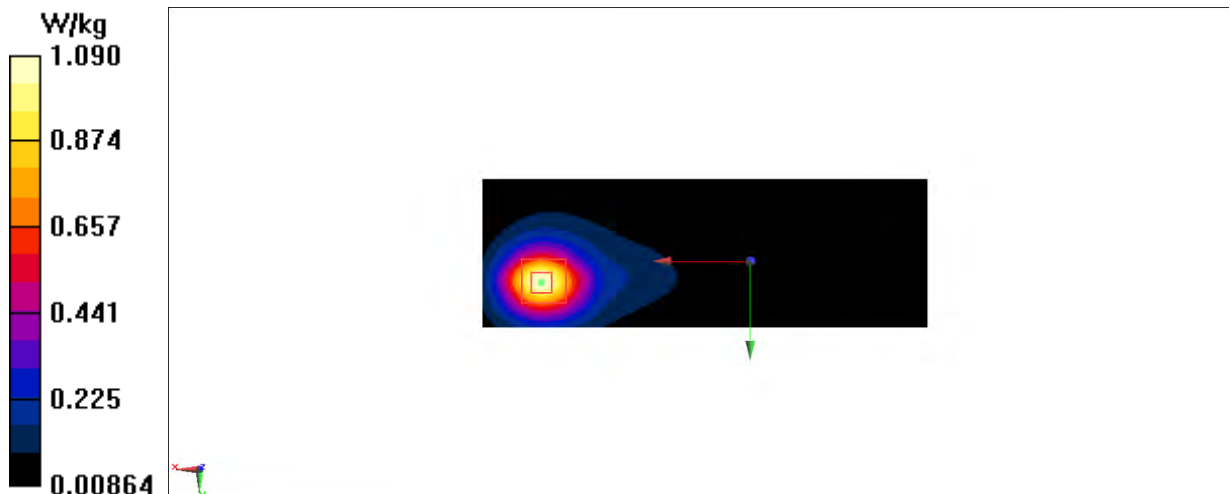
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.194 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.35 W/kg

SAR(1 g) = 0.680 W/kg; SAR(10 g) = 0.343 W/kg

Maximum value of SAR (measured) = 1.09 W/kg



N25 Body

Date: 5/28/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used : $f = 1852.5$ MHz; $\sigma = 1.332$ S/m; $\epsilon_r = 39.933$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G N25 (0) 1852.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.80, 7.80, 7.80)

Area Scan (161x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.14 W/kg

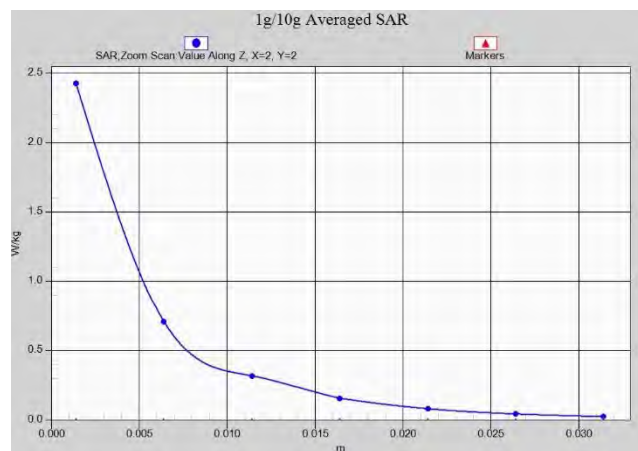
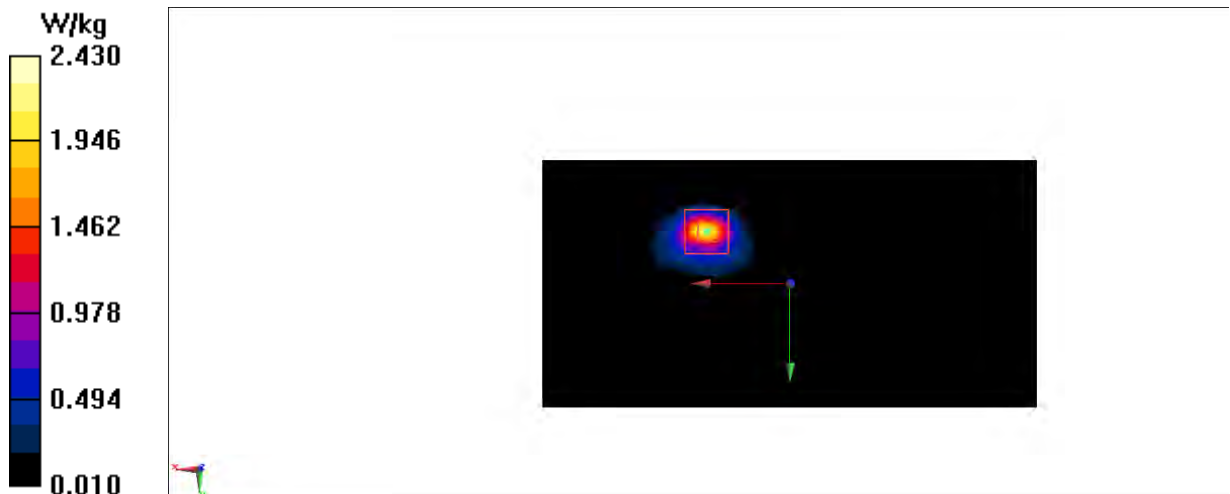
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.066 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 3.43 W/kg

SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.449 W/kg

Maximum value of SAR (measured) = 2.43 W/kg



N41 Body

Date: 6/4/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used : $f = 2636.49$ MHz; $\sigma = 2.031$ S/m; $\epsilon_r = 40.033$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G N41 (0) 2636.49 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.12, 7.12, 7.12)

Area Scan (181x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 2.17 W/kg

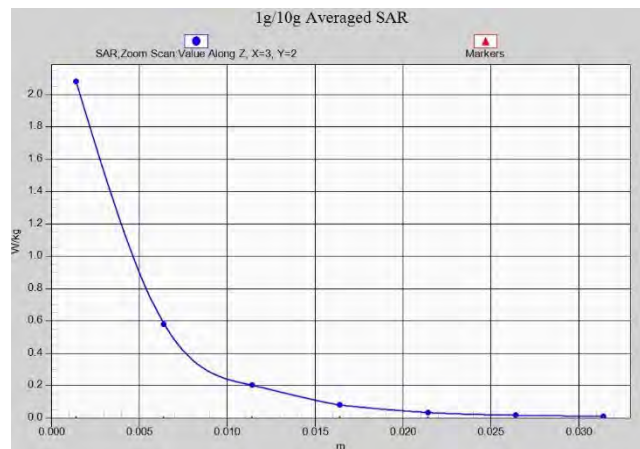
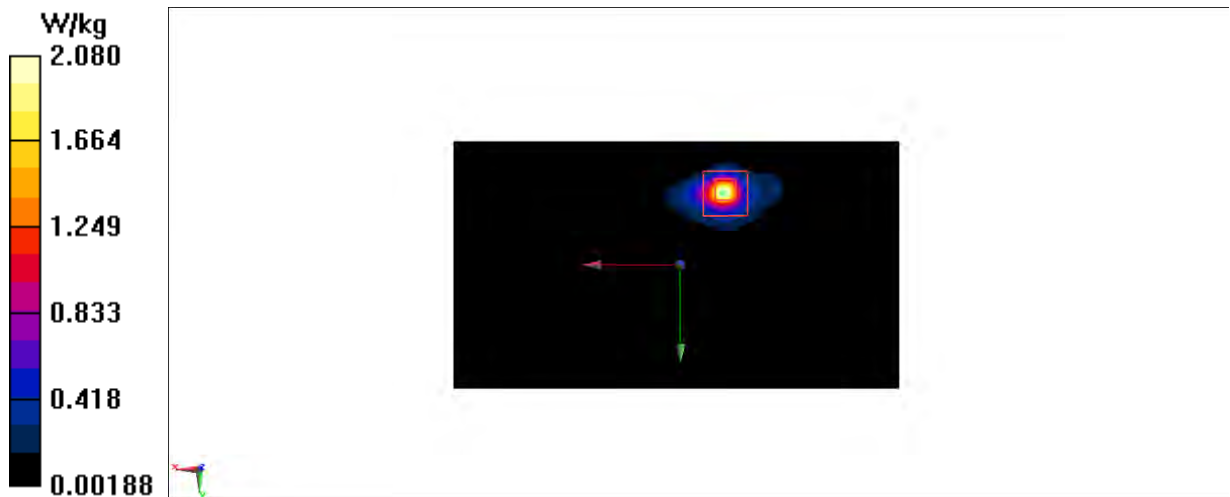
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.8370 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 3.47 W/kg

SAR(1 g) = 0.928 W/kg; SAR(10 g) = 0.308 W/kg

Maximum value of SAR (measured) = 2.08 W/kg



N66 Body

Date: 5/23/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used : $f = 1712.5 \text{ MHz}$; $\sigma = 1.33 \text{ S/m}$; $\epsilon_r = 39.723$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G N66 (0) 1712.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(8.13, 8.13, 8.13)

Area Scan (161x81x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 2.49 W/kg

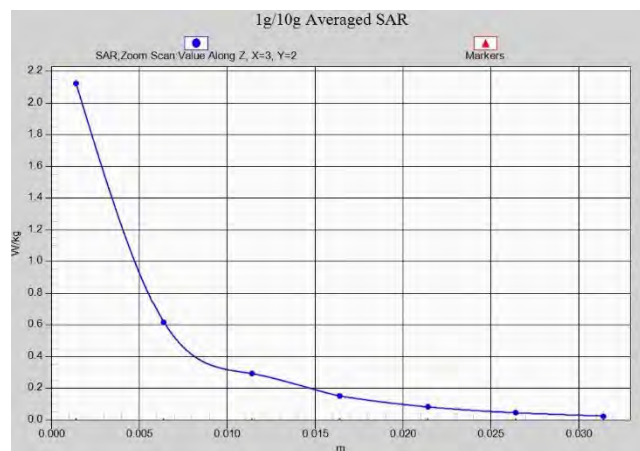
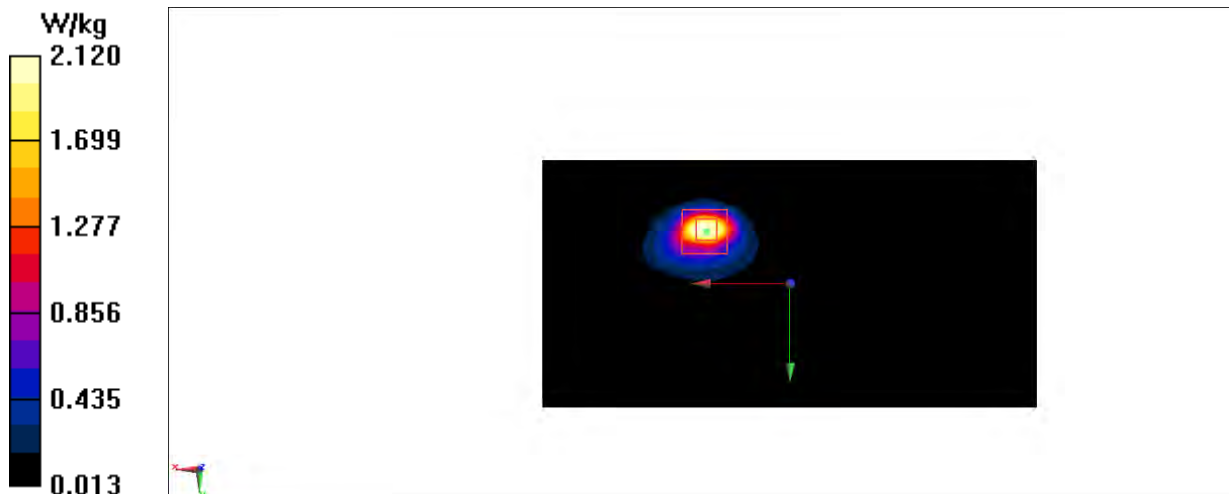
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.604 V/m ; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 3.04 W/kg

SAR(1 g) = 1.09 W/kg ; SAR(10 g) = 0.480 W/kg

Maximum value of SAR (measured) = 2.12 W/kg



N71 Body

Date: 6/10/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used : $f = 665.5 \text{ MHz}$; $\sigma = 0.877 \text{ S/m}$; $\epsilon_r = 40.978$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G N71 (0) 665.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(10.30, 10.30, 10.30)

Area Scan (161x51x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 5.44 W/kg

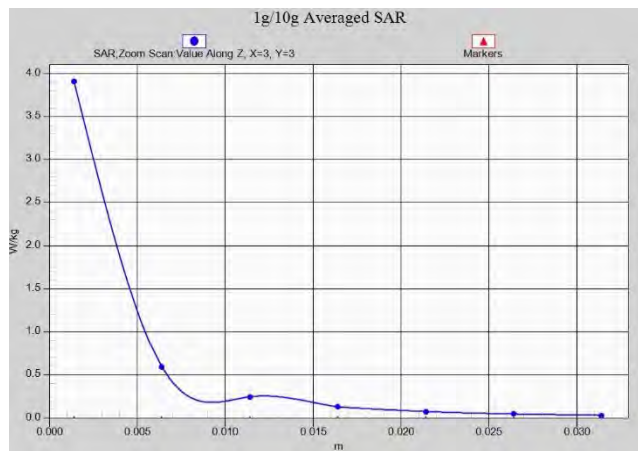
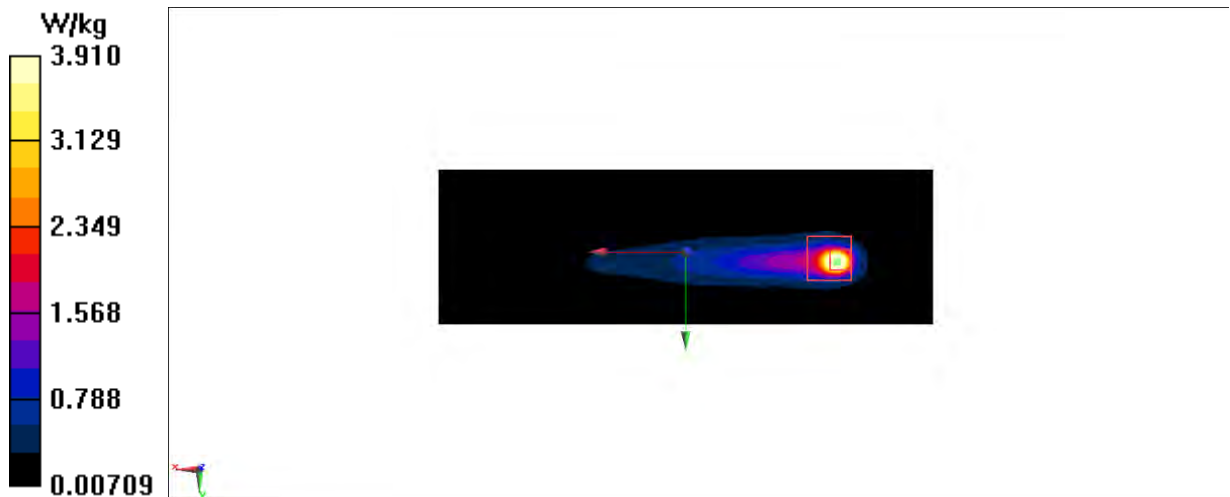
Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 25.69 V/m ; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 7.61 W/kg

SAR(1 g) = 1.32 W/kg ; SAR(10 g) = 0.440 W/kg

Maximum value of SAR (measured) = 3.91 W/kg



N77 Body

Date: 6/16/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used: $f = 3970$ MHz; $\sigma = 3.35$ S/m; $\epsilon_r = 37.626$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G NR (0) 3969.99 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(6.30, 6.30, 6.30)

Area Scan (201x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.97 W/kg

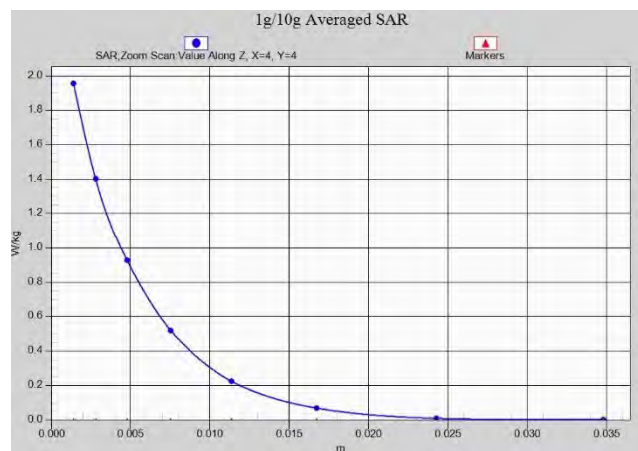
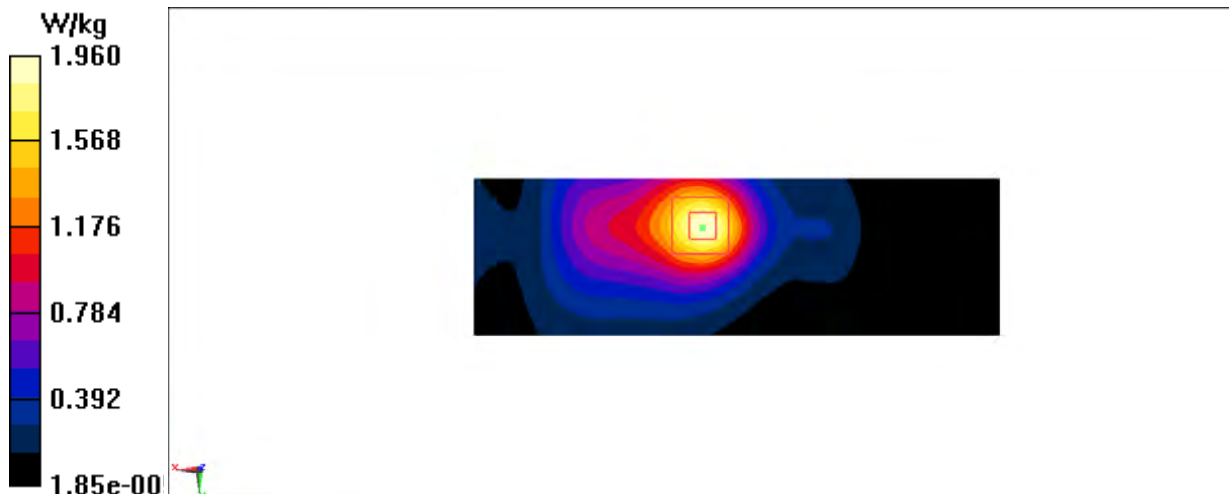
Zoom Scan (9x9x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 17.72 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 2.80 W/kg

SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.472 W/kg

Maximum value of SAR (measured) = 1.96 W/kg



N78 Body

Date: 6/15/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used: $f = 3795$ MHz; $\sigma = 3.215$ S/m; $\epsilon_r = 37.71$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G NR (0) 3795 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(6.41, 6.41, 6.41)

Area Scan (201x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 2.02 W/kg

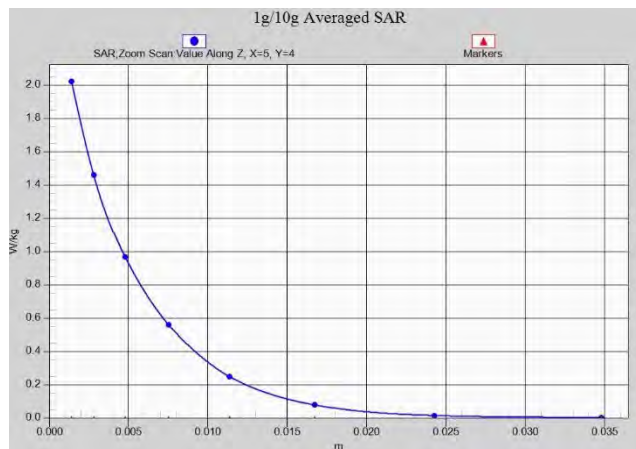
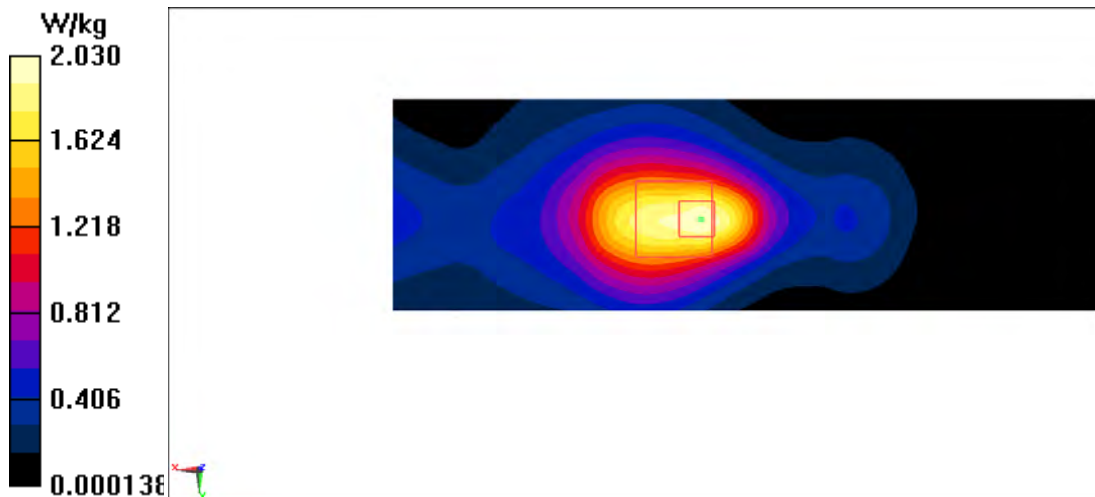
Zoom Scan (10x9x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 21.41 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 2.88 W/kg

SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.497 W/kg

Maximum value of SAR (measured) = 2.03 W/kg



WLAN 2.4G Body

Date: 6/12/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used : $f = 2412$ MHz; $\sigma = 1.743$ S/m; $\epsilon_r = 40.422$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: WIFI 2450 (0) 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.32, 7.32, 7.32)

Area Scan (161x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 3.11 W/kg

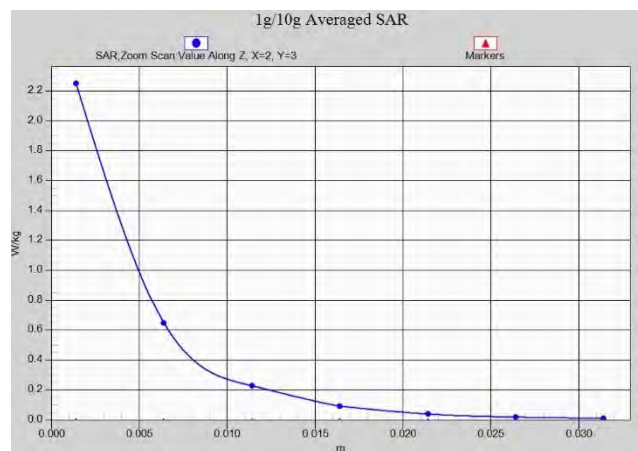
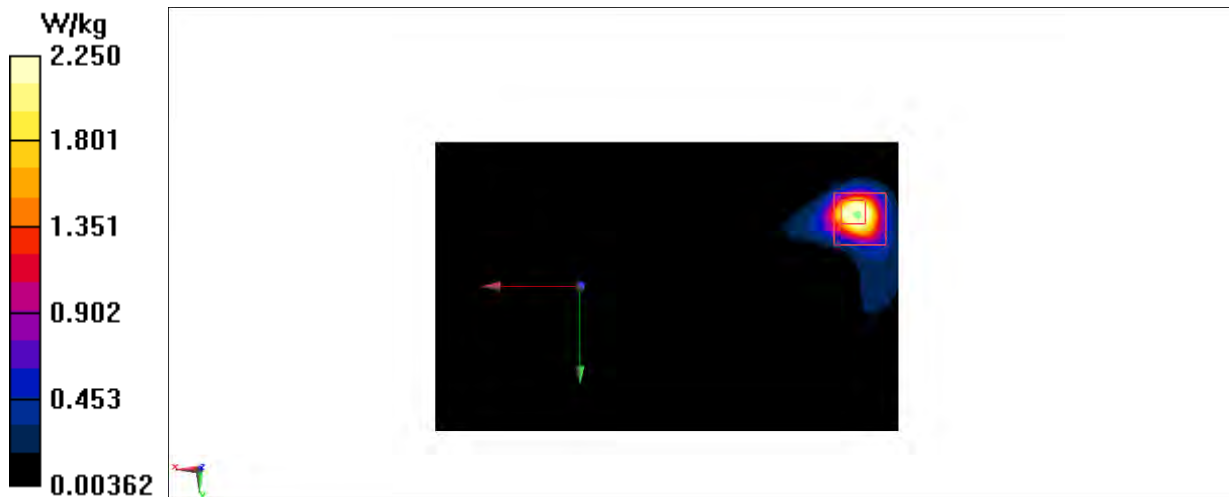
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 3.33 W/kg

SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.427 W/kg

Maximum value of SAR (measured) = 2.25 W/kg



WLAN 5G Body

Date: 6/20/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used: $f = 5825$ MHz; $\sigma = 5.194$ S/m; $\epsilon_r = 35.83$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: Wlan 11a (0) 5825 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(4.64, 4.64, 4.64)

Area Scan (141x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.90 W/kg

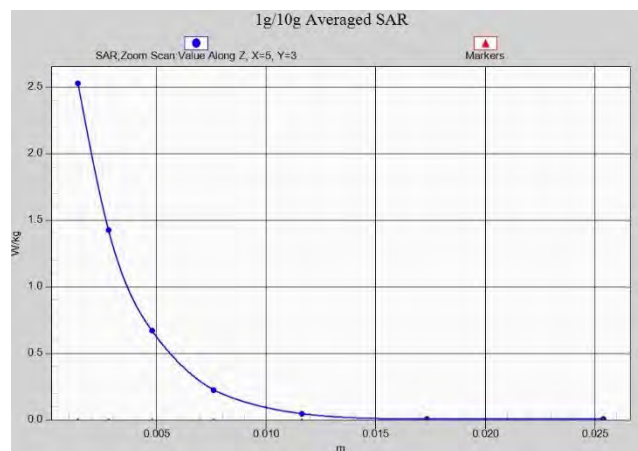
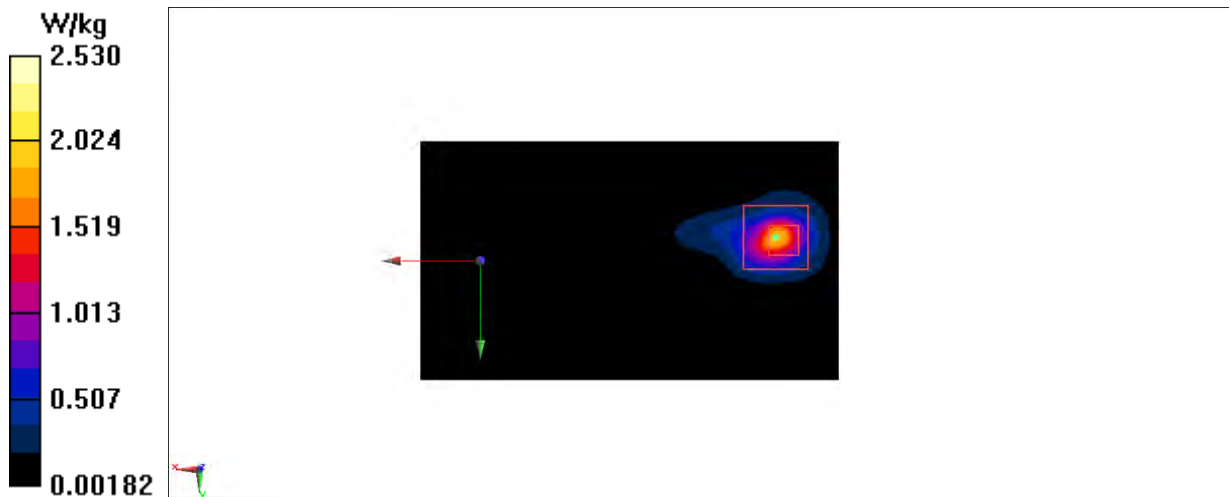
Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 1.065 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 5.37 W/kg

SAR(1 g) = 0.835 W/kg; SAR(10 g) = 0.214 W/kg

Maximum value of SAR (measured) = 2.53 W/kg



BT Body

Date: 6/12/2023

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used : $f = 2441$ MHz; $\sigma = 1.772$ S/m; $\epsilon_r = 40.35$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: Bluetooth 2441 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.32, 7.32, 7.32)

Area Scan (161x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.705 W/kg

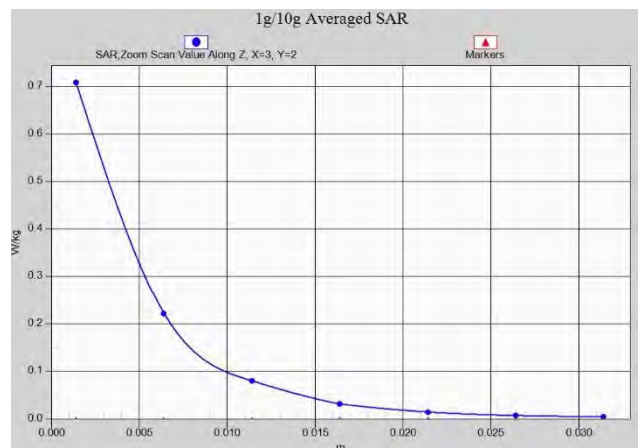
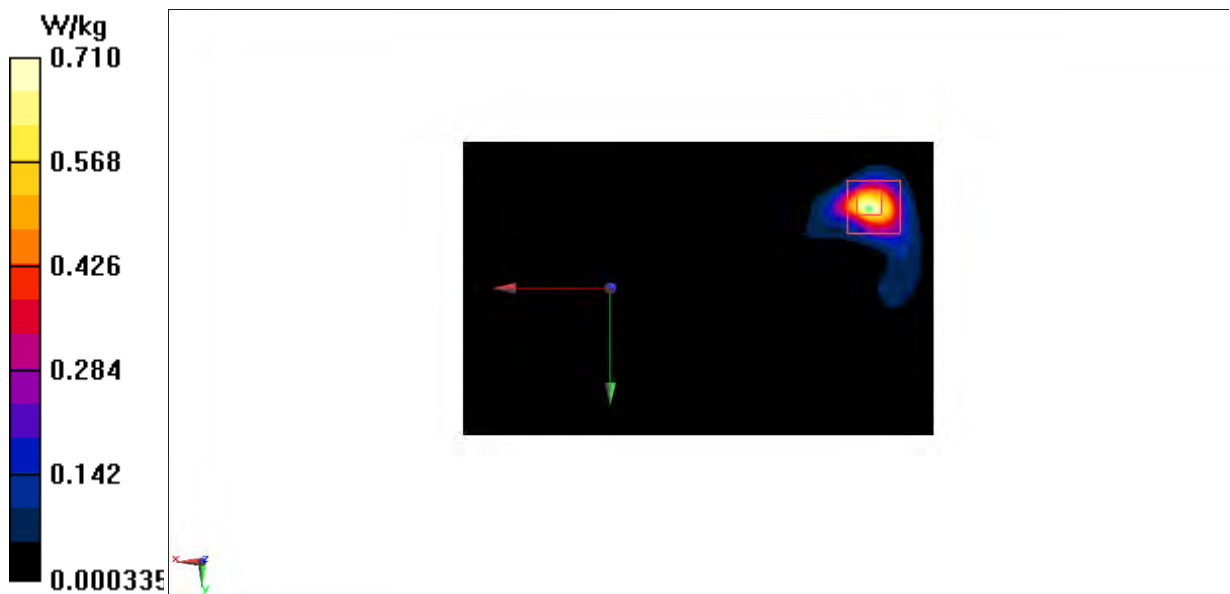
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 1.08 W/kg

SAR(1 g) = 0.348 W/kg; SAR(10 g) = 0.142 W/kg

Maximum value of SAR (measured) = 0.710 W/kg



ANNEX B System Verification Results

750MHz

Date: 6/10/2023

Electronics: DAE4 Sn1331

Medium: H650-7000M

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.911 \text{ S/m}$; $\epsilon_r = 40.642$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(10.3, 10.3, 10.3)

Area Scan (51x141x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 43.55 V/m; Power Drift = 0.11 dB

SAR(1 g) = 2.15 W/kg; SAR(10 g) = 1.39 W/kg

Maximum value of SAR (interpolated) = 2.83 W/kg

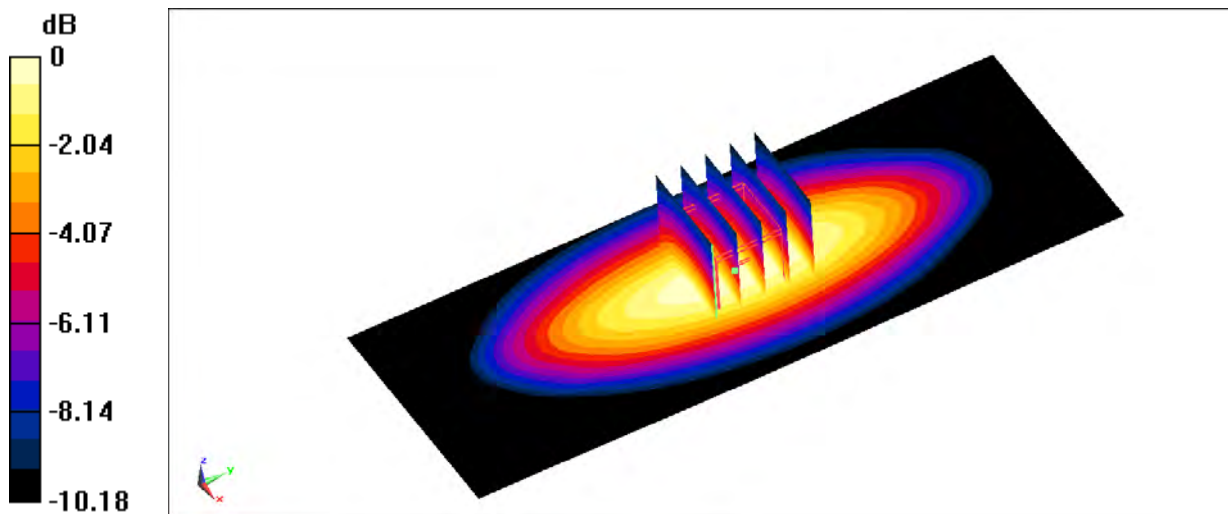
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 43.55 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 3.42 W/kg

SAR(1 g) = 2.12 W/kg; SAR(10 g) = 1.37 W/kg

Maximum value of SAR (measured) = 2.97 W/kg



0 dB = 2.97 W/kg = 4.73 dBW/kg

900MHz

Date: 5/19/2023

Electronics: DAE4 Sn1331

Medium: H650-7000M

Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 0.953 \text{ S/m}$; $\epsilon_r = 40.431$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 900 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(9.81, 9.81, 9.81)

Area Scan (51x131x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 66.37 V/m ; Power Drift = -0.08 dB

SAR(1 g) = 2.75 W/kg ; SAR(10 g) = 1.75 W/kg

Maximum value of SAR (interpolated) = 5.02 W/kg

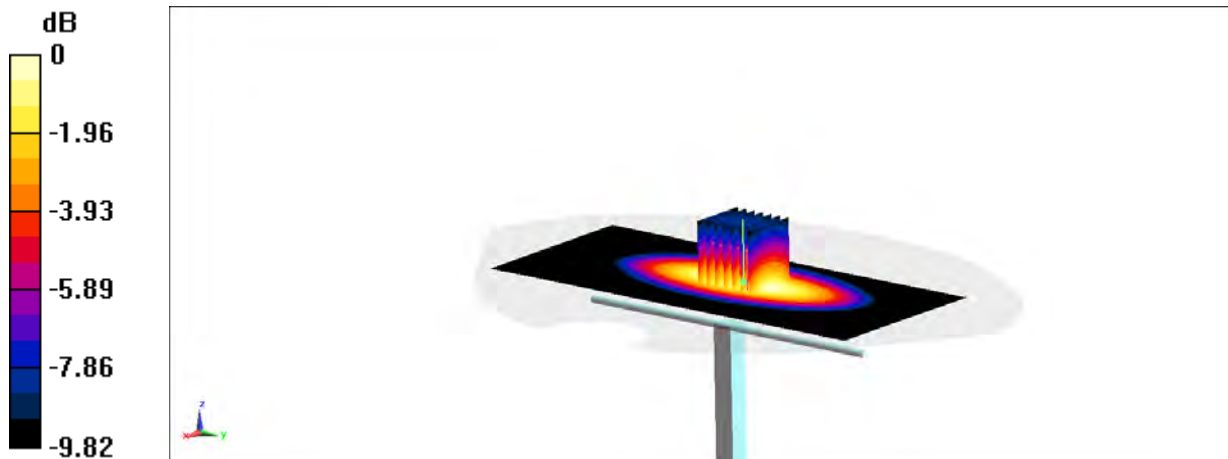
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 66.37 V/m ; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 5.97 W/kg

SAR(1 g) = 2.73 W/kg ; SAR(10 g) = 1.74 W/kg

Maximum value of SAR (measured) = 5.12 W/kg



0 dB = $5.12 \text{ W/kg} = 7.09 \text{ dBW/kg}$

1800MHz

Date: 5/21/2023

Electronics: DAE4 Sn1331

Medium: H650-7000M

Medium parameters used: $f = 1800 \text{ MHz}$; $\sigma = 1.37 \text{ S/m}$; $\epsilon_r = 40.267$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 1800 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(8.13, 8.13, 8.13)

Area Scan (51x101x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 74.33 V/m ; Power Drift = -0.09 dB

SAR(1 g) = 9.75 W/kg; SAR(10 g) = 5.07 W/kg

Maximum value of SAR (interpolated) = 14.7 W/kg

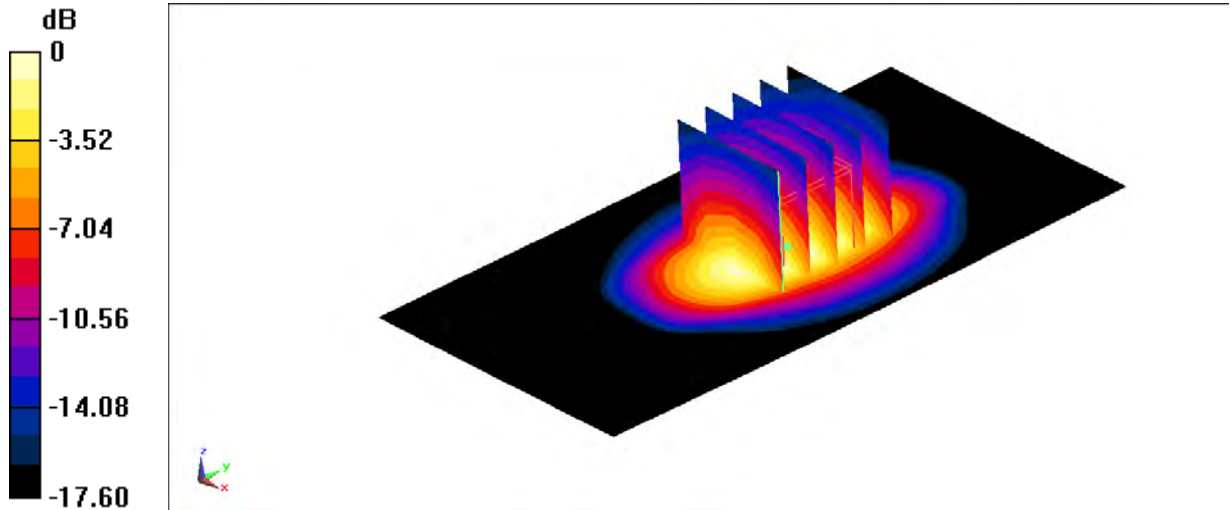
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 74.33 V/m ; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 18.2 W/kg

SAR(1 g) = 9.81 W/kg; SAR(10 g) = 5.11 W/kg

Maximum value of SAR (measured) = 14.5 W/kg



0 dB = 14.5 W/kg = 11.61 dBW/kg

1800MHz

Date: 5/23/2023

Electronics: DAE4 Sn1331

Medium: H650-7000M

Medium parameters used: $f = 1800 \text{ MHz}$; $\sigma = 1.381 \text{ S/m}$; $\epsilon_r = 39.64$; $\rho = 1000 \text{ kg/m}^3$ Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 1800 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(8.13, 8.13, 8.13)

Area Scan (51x101x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 73.56 V/m; Power Drift = -0.07 dB

SAR(1 g) = 9.88 W/kg; SAR(10 g) = 5.17 W/kg

Maximum value of SAR (interpolated) = 15.69 W/kg

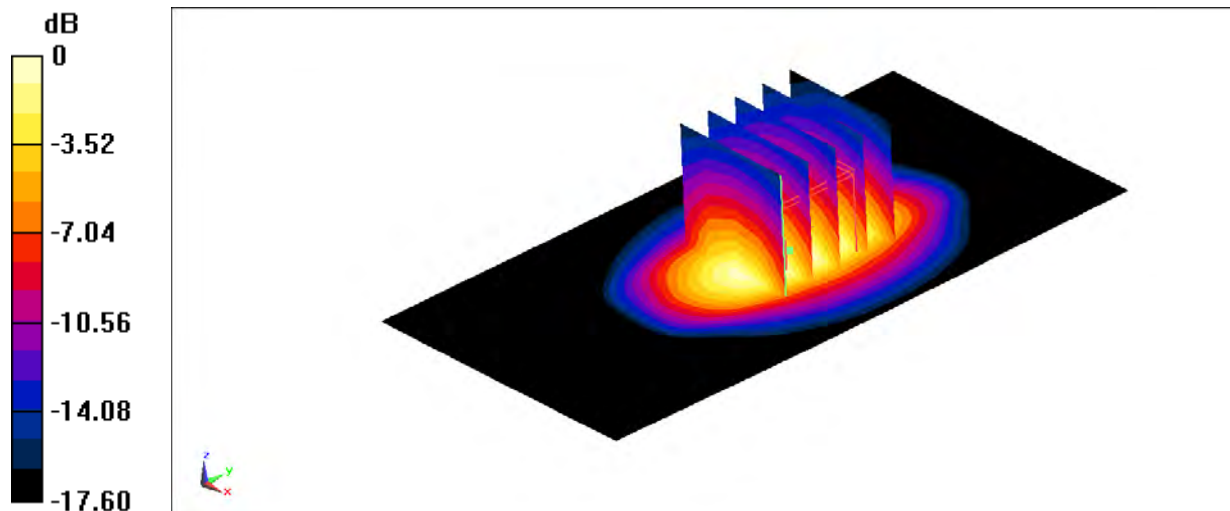
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 73.56 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 18.77 W/kg

SAR(1 g) = 9.87 W/kg; SAR(10 g) = 5.15 W/kg

Maximum value of SAR (measured) = 14.97 W/kg



0 dB = 14.97 W/kg = 11.75 dBW/kg

1900MHz

Date: 5/26/2023

Electronics: DAE4 Sn1331

Medium: H650-7000M

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.354 \text{ S/m}$; $\epsilon_r = 40.231$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.8, 7.8, 7.8)

Area Scan (51x101x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 77.45 V/m; Power Drift = 0.06 dB

SAR(1 g) = 9.85 W/kg; SAR(10 g) = 5.16 W/kg

Maximum value of SAR (interpolated) = 15.34 W/kg

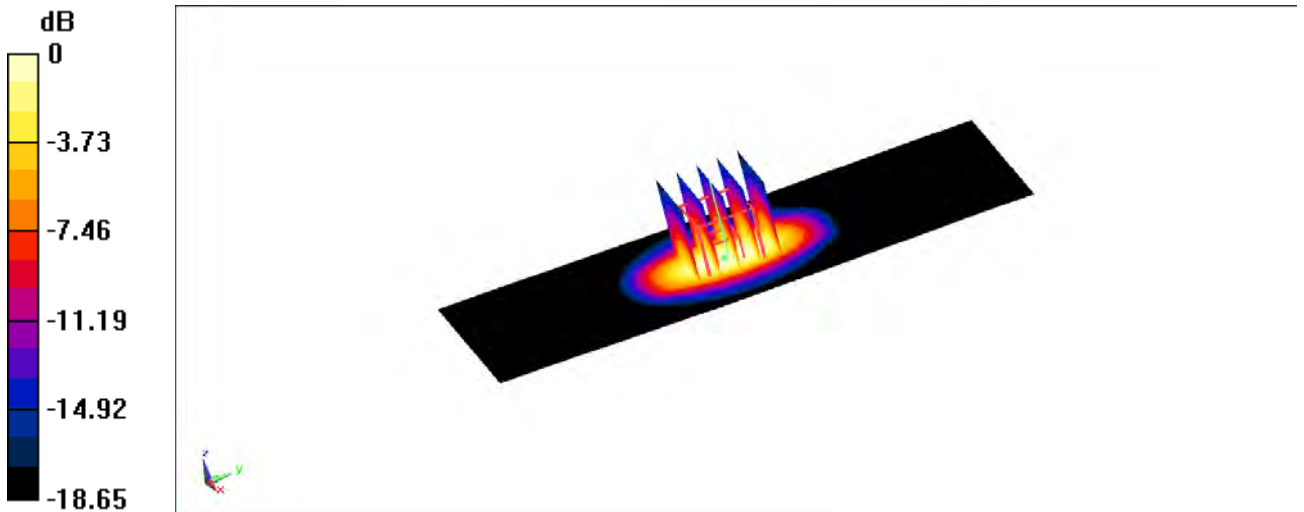
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 77.45 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 18.45 W/kg

SAR(1 g) = 9.81 W/kg; SAR(10 g) = 5.11 W/kg

Maximum value of SAR (measured) = 15.69 W/kg



0 dB = 15.69 W/kg = 11.96 dBW/kg

1900MHz

Date: 5/28/2023

Electronics: DAE4 Sn1331

Medium: H650-7000M

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.367 \text{ S/m}$; $\epsilon_r = 39.844$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.8, 7.8, 7.8)

Area Scan (51x101x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 81.77 V/m ; Power Drift = -0.06 dB

SAR(1 g) = 9.95 W/kg; SAR(10 g) = 5.18 W/kg

Maximum value of SAR (interpolated) = 16.35 W/kg

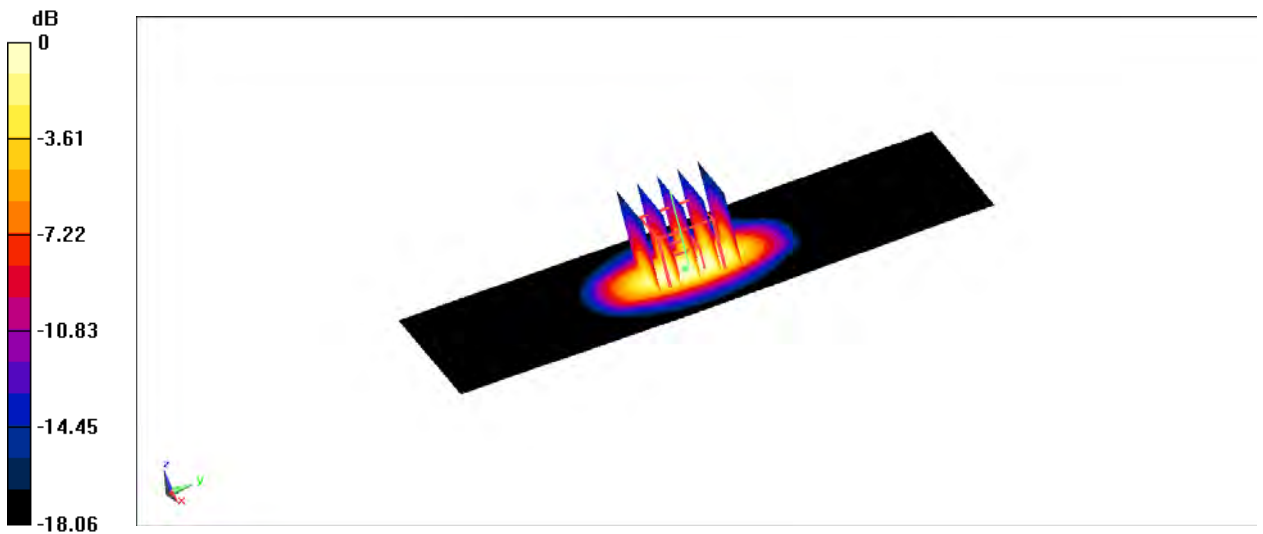
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 81.77 V/m ; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 18.46 W/kg

SAR(1 g) = 9.98 W/kg; SAR(10 g) = 5.21 W/kg

Maximum value of SAR (measured) = 15.64 W/kg



0 dB = 15.64 W/kg = 11.94 dBW/kg

2450MHz

Date: 6/12/2023

Electronics: DAE4 Sn1331

Medium: H650-7000M

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.774$ S/m; $\epsilon_r = 40.345$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 2450 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.32, 7.32, 7.32)

Area Scan (61x81x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Reference Value = 112.6 V/m; Power Drift = -0.06 dB

SAR(1 g) = 13.36 W/kg; SAR(10 g) = 6.24 W/kg

Maximum value of SAR (interpolated) = 21.5 W/kg

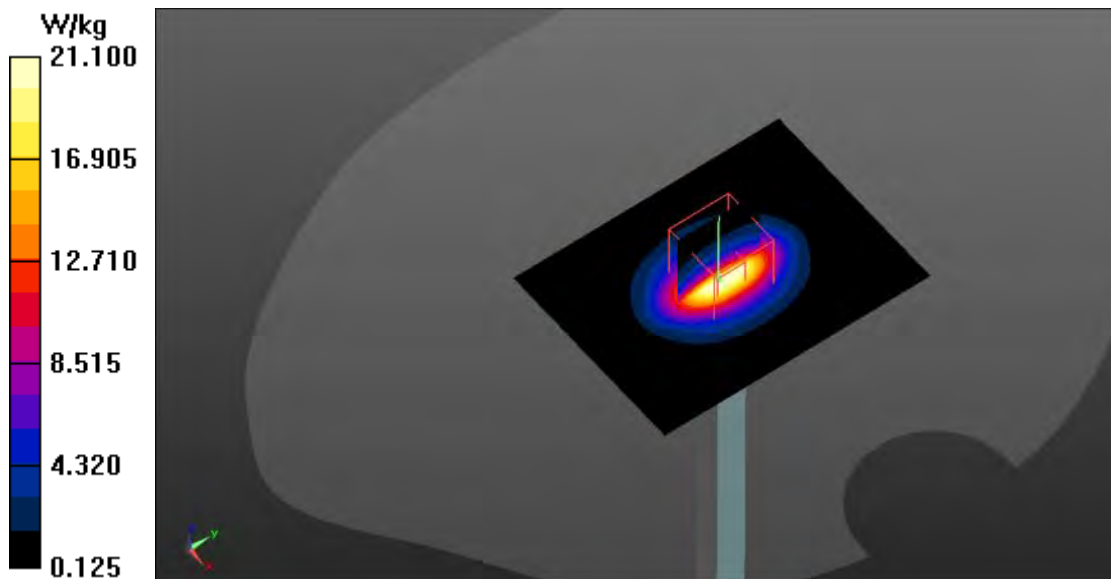
Zoom Scan (7x7x5)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 112.6 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 26.3 W/kg

SAR(1 g) = 13.41 W/kg; SAR(10 g) = 6.29 W/kg

Maximum value of SAR (measured) = 21.1 W/kg



0 dB = 21.1 W/kg = 13.24 dBW/kg

2600MHz

Date: 6/2/2023

Electronics: DAE4 Sn1331

Medium: H650-7000M

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.974$ S/m; $\epsilon_r = 38.37$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 2600 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.12, 7.12, 7.12)

Area Scan (61x81x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Reference Value = 104.54 V/m; Power Drift = 0.07 dB

SAR(1 g) = 13.93 W/kg; SAR(10 g) = 6.3 W/kg

Maximum value of SAR (interpolated) = 24.8 W/kg

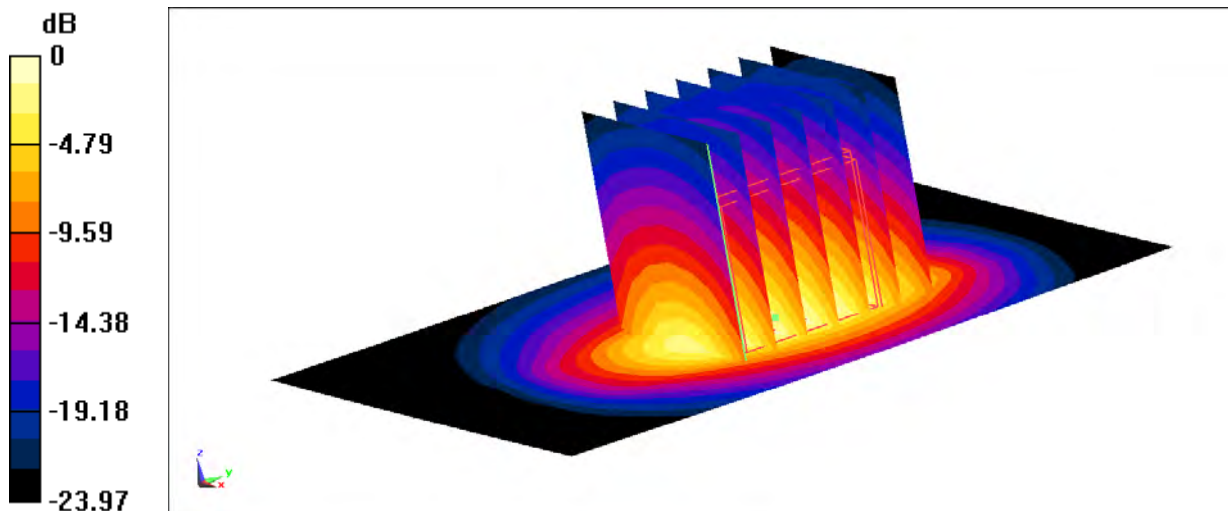
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 104.54 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 30.8 W/kg

SAR(1 g) = 13.87 W/kg; SAR(10 g) = 6.24 W/kg

Maximum value of SAR (measured) = 23.4 W/kg



0 dB = 23.4 W/kg = 13.69 dBW/kg

2600MHz

Date: 6/4/2023

Electronics: DAE4 Sn1331

Medium: H650-7000M

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.986$ S/m; $\epsilon_r = 40.037$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 2600 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7464 ConvF(7.12, 7.12, 7.12)

Area Scan (61x81x1): Interpolated grid: dx=1.0 00 mm, dy=1.000 mm

Reference Value = 102.34 V/m; Power Drift = 0.08 dB

SAR(1 g) = 13.94 W/kg; SAR(10 g) = 6.31 W/kg

Maximum value of SAR (interpolated) = 23.74 W/kg

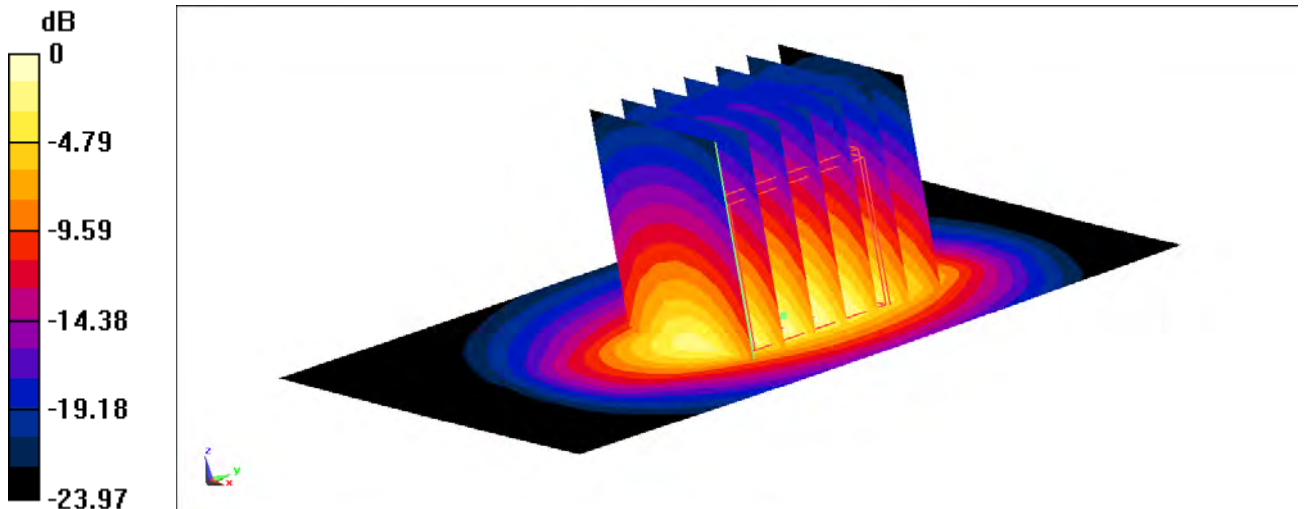
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 102.34 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 34.57 W/kg

SAR(1 g) = 13.98 W/kg; SAR(10 g) = 6.34 W/kg

Maximum value of SAR (measured) = 22.78 W/kg



0 dB = 22.78 W/kg = 13.58 dBW/kg

3300MHz

Date: 6/14/2023

Electronics: DAE4 Sn1331

Medium: H650-7000M

Medium parameters used: $f = 3300\text{MHz}$; $\sigma = 2.713\text{mho/m}$; $\epsilon_r = 38.424$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 3300MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(6.75, 6.75, 6.75)

Area Scan (81x191x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 13.25 W/kg

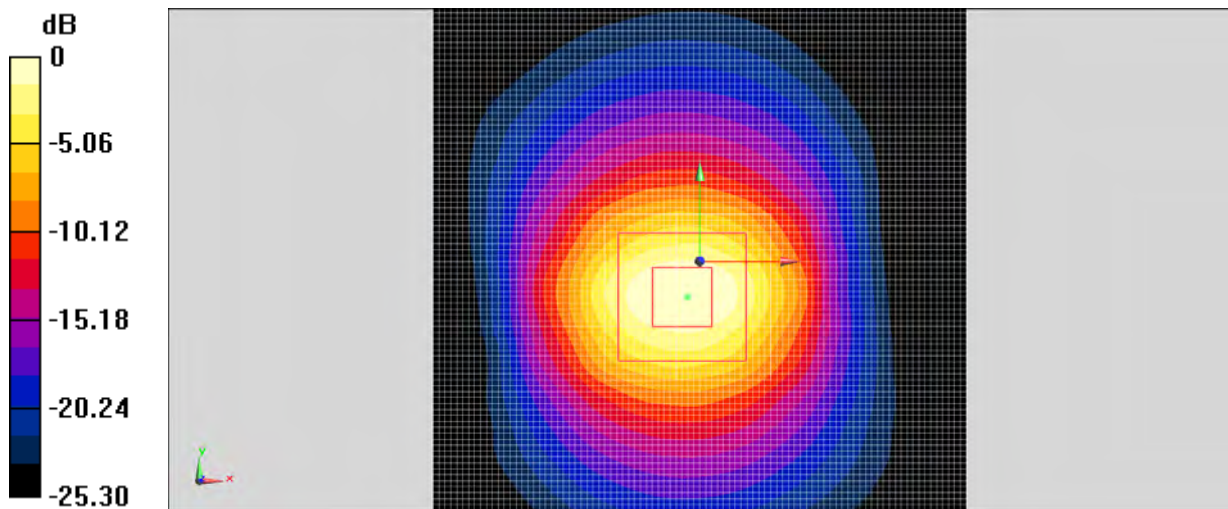
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 56.12 V/m ; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 18.07 W/kg

SAR(1 g) = 6.43 W/kg ; SAR(10 g) = 2.43 W/kg

Maximum value of SAR (measured) = 12.56 W/kg



0 dB = 12.56 W/kg = 10.99 dBW/kg

3500MHz

Date: 6/14/2023

Electronics: DAE4 Sn1331

Medium: H650-7000M

Medium parameters used: $f = 3500\text{MHz}$; $\sigma = 2.833 \text{ mho/m}$; $\epsilon_r = 37.652$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 3500MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(6.61, 6.61, 6.61)

Area Scan (81x191x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy= 1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 12.35 W/kg

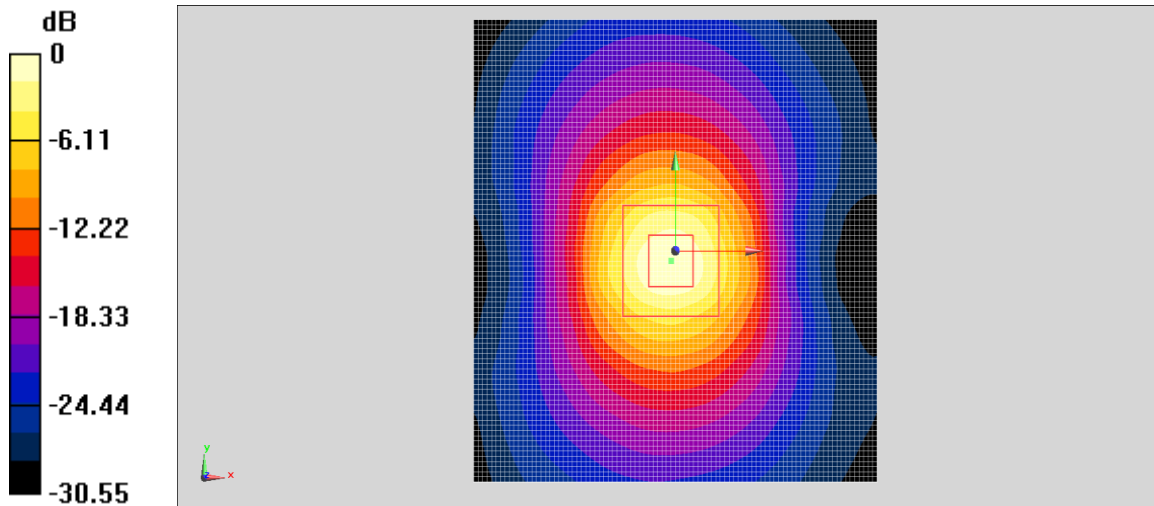
Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 69.52 V/m ; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 16.65 W/kg

SAR(1 g) = 6.62 W/kg ; SAR(10 g) = 2.47 W/kg

Maximum value of SAR (measured) = 12.35 W/kg



0 dB = 12.56 W/kg = 10.99 dBW/kg

3700MHz

Date: 6/15/2023

Electronics: DAE4 Sn1331

Medium: H650-7000M

Medium parameters used: $f = 3700\text{MHz}$; $\sigma = 3.128 \text{ mho/m}$; $\epsilon_r = 37.785$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 3700MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(6.41, 6.41, 6.41)

Area Scan (81x191x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 13.55 W/kg

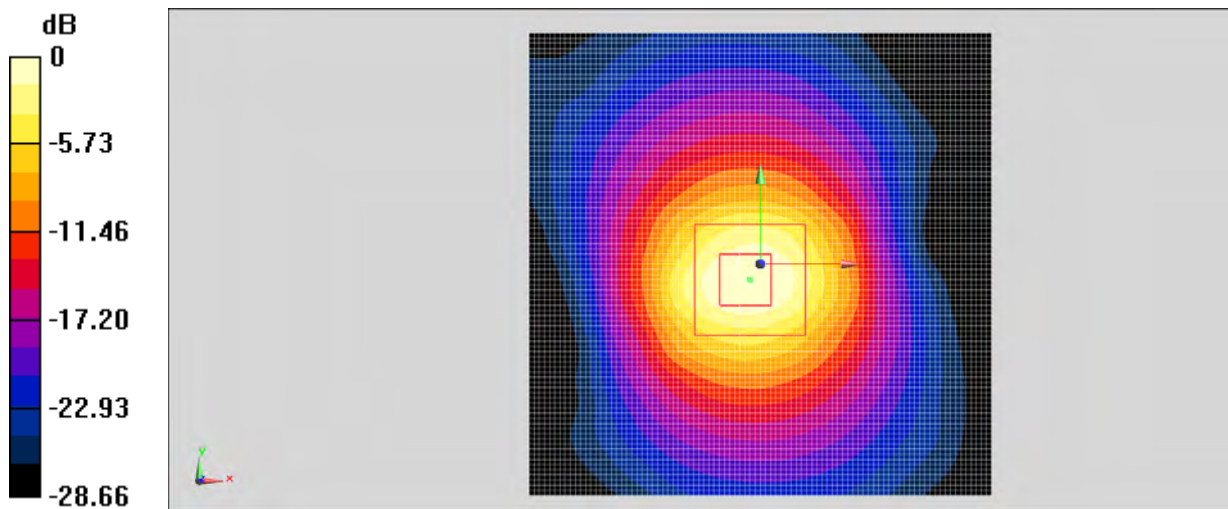
Zoom Scan (8x8x7)/Cube 0: : Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 65.23 V/m ; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 19.86 W/kg

SAR(1 g) = 6.83 W/kg ; SAR(10 g) = 2.47 W/kg

Maximum value of SAR (measured) = 12.85 W/kg



0 dB = $12.85 \text{ W/kg} = 11.09 \text{ dBW/kg}$

3900MHz

Date: 6/16/2023

Electronics: DAE4 Sn1331

Medium: H650-7000M

Medium parameters used: $f = 3900\text{MHz}$; $\sigma = 3.27 \text{ mho/m}$; $\epsilon_r = 37.752$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 3900MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(6.3, 6.3, 6.3)

Area Scan (81x191x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 13.46 W/kg

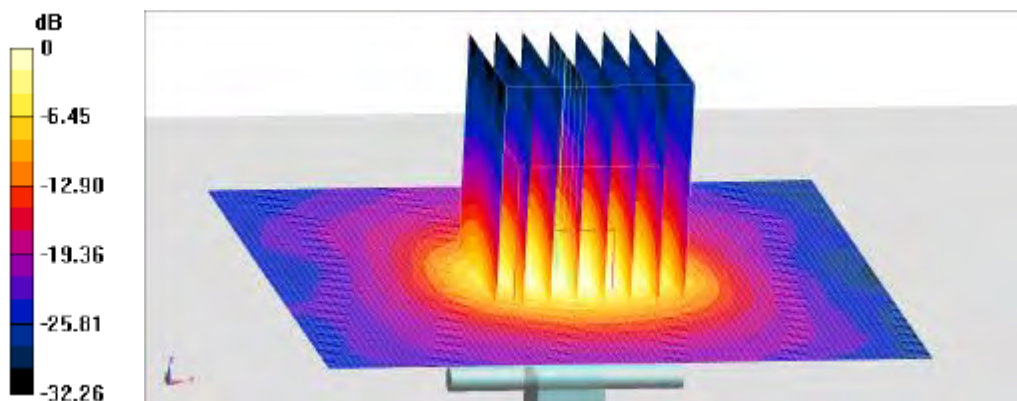
Zoom Scan (8x8x7)/Cube 0: : Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 67.58 V/m ; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 19.35 W/kg

SAR(1 g) = 7.11 W/kg ; SAR(10 g) = 2.49 W/kg

Maximum value of SAR (measured) = 13.2 W/kg



0 dB = 13.2 W/kg = 11.21 dBW/kg

4100MHz

Date: 6/16/2023

Electronics: DAE4 Sn1331

Medium: H650-7000M

Medium parameters used: $f = 4100\text{MHz}$; $\sigma = 3.495 \text{ mho/m}$; $\epsilon_r = 37.654$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 4100MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(6.22, 6.22, 6.22)

Area Scan (81x191x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 13.51 W/kg

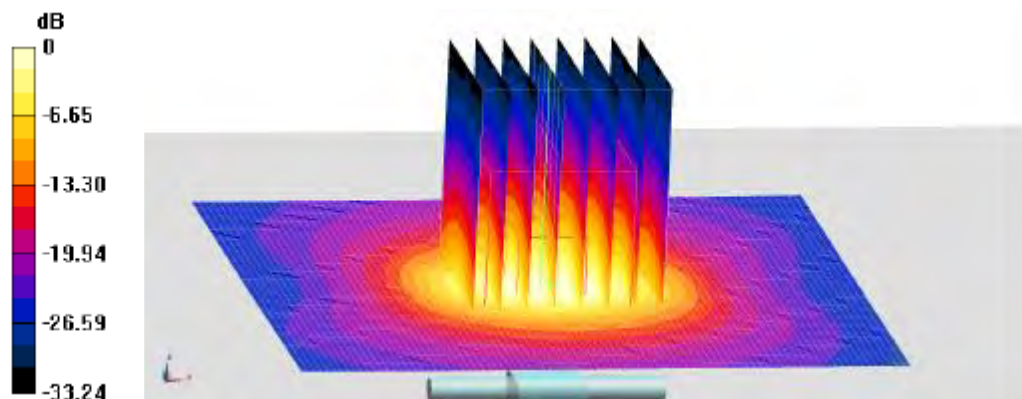
Zoom Scan (8x8x7)/Cube 0: : Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 73.41 V/m ; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 19.11 W/kg

SAR(1 g) = 6.75 W/kg ; SAR(10 g) = 2.32 W/kg

Maximum value of SAR (measured) = 13.4 W/kg



0 dB = $13.4 \text{ W/kg} = 11.27 \text{ dBW/kg}$

5250MHz

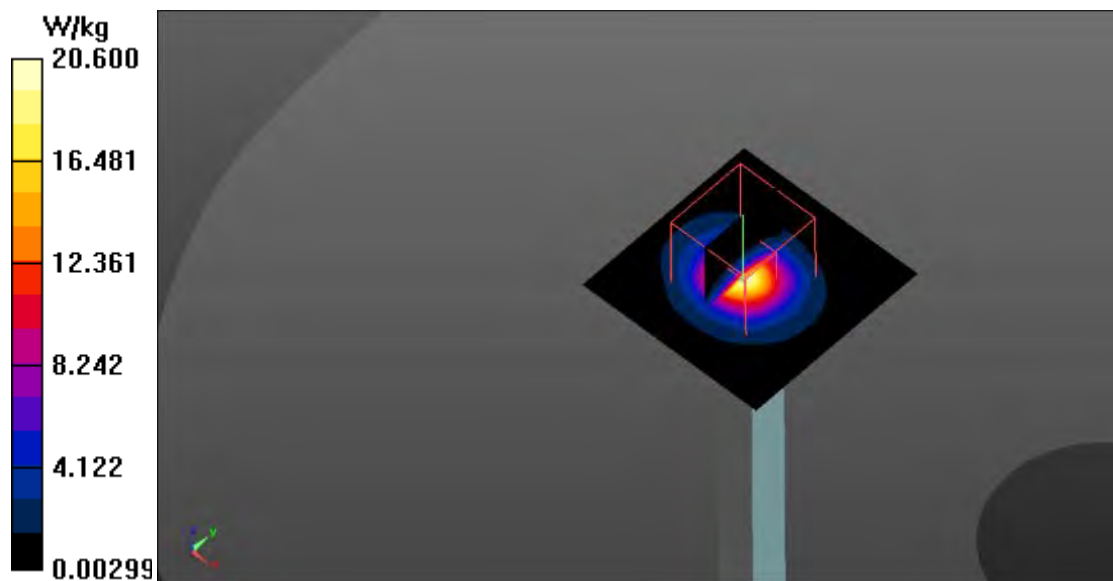
Date: 6/18/2023

Electronics: DAE4 Sn1331

Medium: H650-7000M

Medium parameters used: $f = 5250\text{MHz}$; $\sigma = 4.685 \text{ mho/m}$; $\epsilon_r = 35.68$; $\rho = 1000 \text{ kg/m}^3$ Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 5250MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(4.98, 4.98, 4.98)

Area Scan (51x51x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$ Maximum value of SAR (interpolated) = 20.4 W/kg **Zoom Scan (7x7x6)/Cube 0:** Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$ Reference Value = 74.63 V/m ; Power Drift = 0.16 dB Peak SAR (extrapolated) = 33.5 W/kg **SAR(1 g) = 7.73 W/kg ; SAR(10 g) = 2.21 W/kg** Maximum value of SAR (measured) = 20.6 W/kg  $0 \text{ dB} = 20.6 \text{ W/kg} = 13.14 \text{ dBW/kg}$

5600MHz

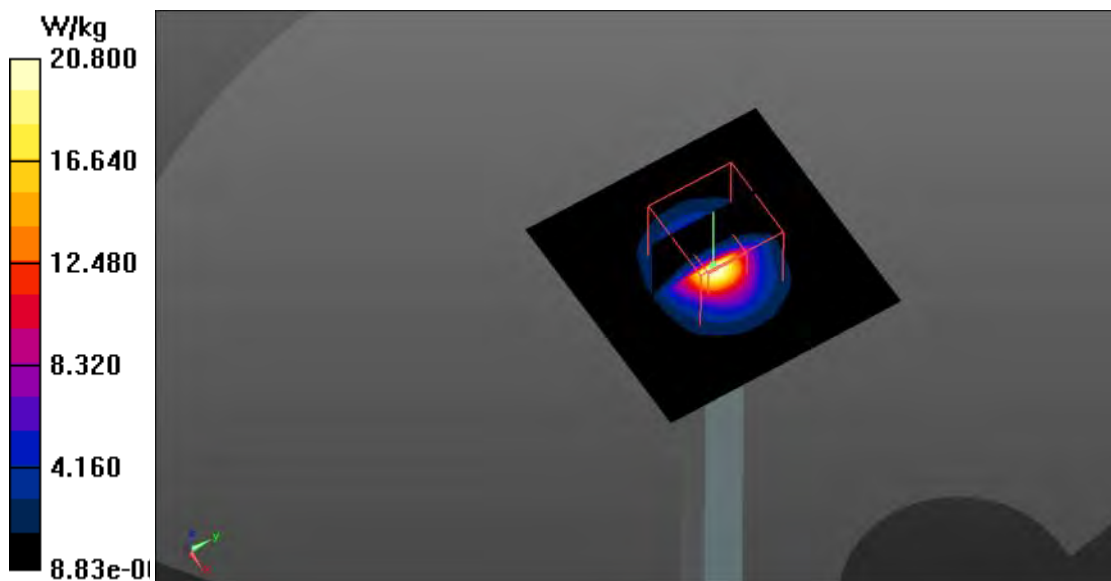
Date: 6/19/2023

Electronics: DAE4 Sn1331

Medium: H650-7000M

Medium parameters used: $f = 5600\text{MHz}$; $\sigma = 4.941 \text{ mho/m}$; $\epsilon_r = 35.863$; $\rho = 1000 \text{ kg/m}^3$ Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 5600MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(4.57, 4.57, 4.57)

Area Scan (61x61x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$ Maximum value of SAR (interpolated) = 21.14 W/kg **Zoom Scan (9x9x6)/Cube 0:** Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$ Reference Value = 66.41 V/m ; Power Drift = 0.09 dB Peak SAR (extrapolated) = 35.33 W/kg **SAR(1 g) = 8.14 W/kg ; SAR(10 g) = 2.32 W/kg** Maximum value of SAR (measured) = 20.8 W/kg  $0 \text{ dB} = 20.8 \text{ W/kg} = 13.18 \text{ dBW/kg}$

5750MHz

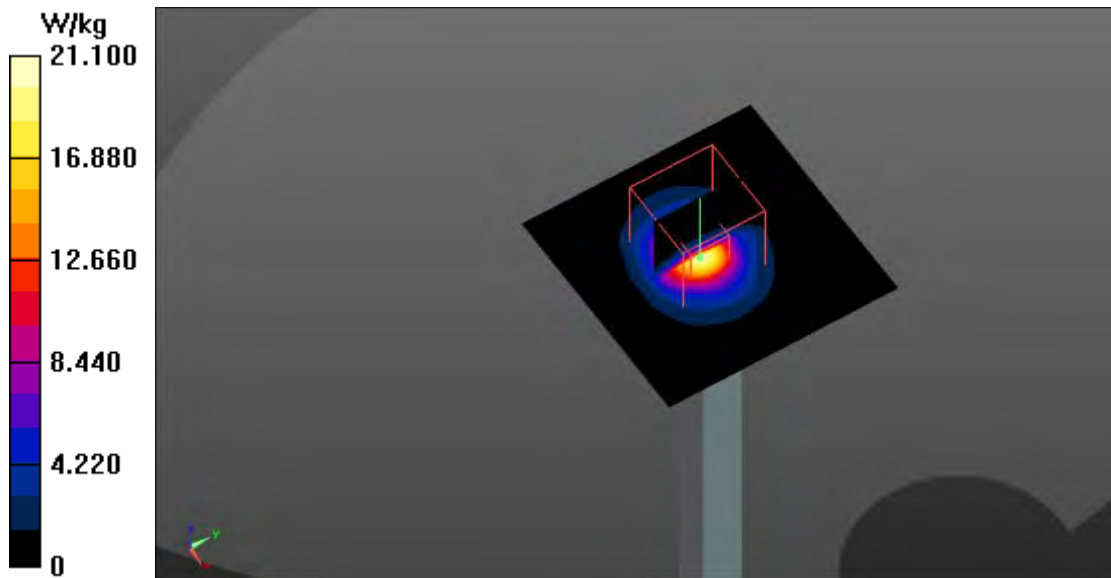
Date: 6/20/2023

Electronics: DAE4 Sn1331

Medium: H650-7000M

Medium parameters used: $f = 5750\text{MHz}$; $\sigma = 5.127 \text{ mho/m}$; $\epsilon_r = 35.923$; $\rho = 1000 \text{ kg/m}^3$ Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C Communication System: CW Frequency: 5750MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(4.64, 4.64,4.64)

Area Scan (61x61x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$ Maximum value of SAR (interpolated) = 20.34 W/kg **Zoom Scan (8x8x12)/Cube 0:** Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$ Reference Value = 66.67 V/m ; Power Drift = 0.11 dB Peak SAR (extrapolated) = 36.43 W/kg **SAR(1 g) = 8.16 W/kg ; SAR(10 g) = 2.31 W/kg** Maximum value of SAR (measured) = 21.1 W/kg  $0 \text{ dB} = 21.1 \text{ W/kg} = 13.24 \text{ dBW/kg}$

The SAR system verification must be required that the area scan estimated 1-g SAR is within 3% of the zoom scan 1-g SAR.

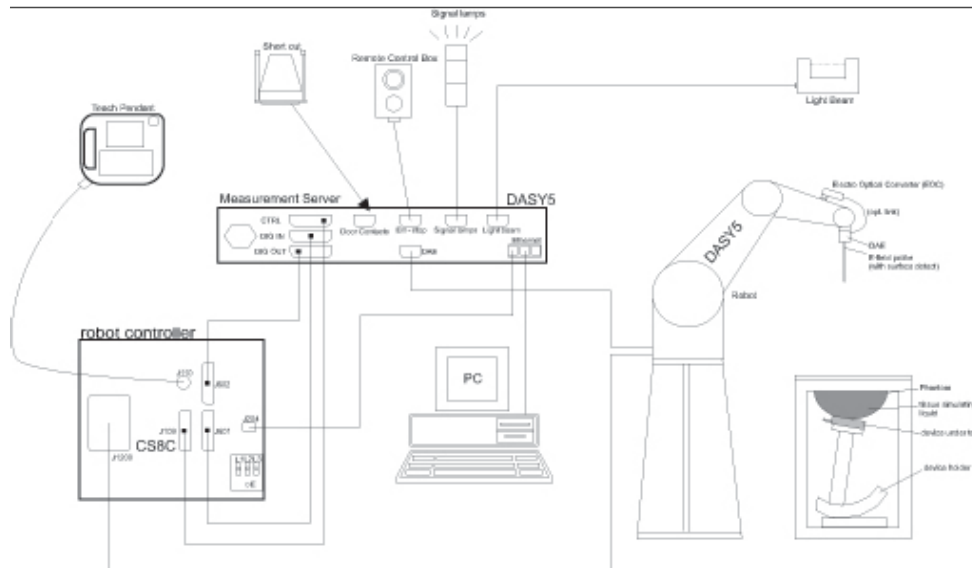
Table B.1 Comparison between area scan and zoom scan for system verification

Date	Band	Position	Area scan (1g)	Zoom scan (1g)	Drift (%)
2023-6-10	750 MHz	Head	2.15	2.12	2.15
2023-5-19	900 MHz	Head	2.75	2.73	2.75
2023-5-21	1800 MHz	Head	9.75	9.81	9.75
2023-5-23	1800 MHz	Head	9.88	9.87	9.88
2023-5-26	1900 MHz	Head	9.85	9.81	9.85
2023-5-28	1900 MHz	Head	9.95	9.98	9.95
2023-6-12	2450 MHz	Head	13.36	13.41	13.36
2023-6-2	2600 MHz	Head	13.93	13.87	13.93
2023-6-4	2600 MHz	Head	13.94	13.98	13.94

ANNEX C SAR Measurement Setup

C.1 Measurement Set-up

The Dasy4 or DASY5 system for performing compliance tests is illustrated above graphically. This system consists of the following items:



Picture C.1 SAR Lab Test Measurement Set-up

- A standard high precision 6-axis robot (StäubliTX=RX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP and the DASY4 or DASY5 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as
- warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

C.2 Dasy4 or DASY5 E-field Probe System

The SAR measurements were conducted with the dosimetric probe designed in the classical triangular configuration and optimized for dosimetric evaluation. The probe is constructed using the thick film technique; with printed resistive lines on ceramic substrates. The probe is equipped with an optical multifiber line ending at the front of the probe tip. It is connected to the EOC box on the robot arm and provides an automatic detection of the phantom surface. Half of the fibers are connected to a pulsed infrared transmitter, the other half to a synchronized receiver. As the probe approaches the surface, the reflection from the surface produces a coupling from the transmitting to the receiving fibers. This reflection increases first during the approach, reaches maximum and then decreases. If the probe is flatly touching the surface, the coupling is zero. The distance of the coupling maximum to the surface is independent of the surface reflectivity and largely independent of the surface to probe angle. The DASY4 or DASY5 software reads the reflection during a software approach and looks for the maximum using 2nd ord curve fitting. The approach is stopped at reaching the maximum.

Probe Specifications:

Model:	ES3DV3, EX3DV4
Frequency	10MHz — 6.0GHz(EX3DV4)
Range:	10MHz — 4GHz(ES3DV3)
Calibration:	In head and body simulating tissue at Frequencies from 835 up to 5800MHz
Linearity:	± 0.2 dB(30 MHz to 6 GHz) for EX3DV4 ± 0.2 dB(30 MHz to 4 GHz) for ES3DV3
DynamicRange:	10 mW/kg — 100W/kg
Probe Length:	330 mm
Probe Tip	
Length:	20 mm
Body Diameter:	12 mm
Tip Diameter:	2.5 mm (3.9 mm for ES3DV3)
Tip-Center:	1 mm (2.0mm for ES3DV3)
Application:	SAR Dosimetry Testing Compliance tests of mobile phones Dosimetry in strong gradient fields



Picture C.2Near-field Probe



Picture C.3E-field Probe

C.3 E-field Probe Calibration

Each E-Probe/Probe Amplifier combination has unique calibration parameters. A TEM cell calibration procedure is conducted to determine the proper amplifier settings to enter in the probe parameters. The amplifier settings are determined for a given frequency by subjecting the probe to a known E-field density (1 mW/cm²) using an RF Signal generator, TEM cell, and RF Power Meter.

The free space E-field from amplified probe outputs is determined in a test chamber. This calibration can be performed in a TEM cell if the frequency is below 1 GHz and in a waveguide or

other methodologies above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees until the three channels show the maximum reading. The power density readings equates to 1 mW/cm².

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The E-field in the medium correlates with the temperature rise in the dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$SAR = C \frac{\Delta T}{\Delta t}$$

Where:

Δt = Exposure time (30 seconds),

C = Heat capacity of tissue (brain or muscle),

ΔT = Temperature increase due to RF exposure.

$$SAR = \frac{|E|^2 \cdot \sigma}{\rho}$$

Where:

σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m³).

C.4 Other Test Equipment

C.4.1 Data Acquisition Electronics(DAE)

The data acquisition electronics consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information, as well as an optical uplink for commands and the clock.

The mechanical probe mounting device includes two different sensor systems for frontal and sideways probe contacts. They are used for mechanical surface detection and probe collision detection.

The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.



PictureC.4: DAE

C.4.2 Robot

The SPEAG DASY system uses the high precision robots (DASY4: RX90XL; DASY5: RX160L) type from Stäubli SA (France). For the 6-axis controller system, the robot controller version from Stäubli is used. The Stäubli robot series have many features that are important for our application:

- High precision (repeatability 0.02mm)
- High reliability (industrial design)
- Low maintenance costs (virtually maintenance free due to direct drive gears; no belt drives)
- Jerk-free straight movements (brushless synchron motors; no stepper motors)
- Low ELF interference (motor control fields shielded via the closed metallic construction shields)



Picture C.5 DASY 4



Picture C.6 DASY 5

C.4.3 Measurement Server

The Measurement server is based on a PC/104 CPU board with CPU (dasy4: 166 MHz, Intel Pentium; DASY5: 400 MHz, Intel Celeron), chipdisk (DASY4: 32 MB; DASY5: 128MB), RAM (DASY4: 64 MB, DASY5: 128MB). The necessary circuits for communication with the DAE electronic box, as well as the 16 bit AD converter system for optical detection and digital I/O interface are contained on the DASY I/O board, which is directly connected to the PC/104 bus of the CPU board.

The measurement server performs all real-time data evaluation of field measurements and surface detection, controls robot movements and handles safety operation. The PC operating system cannot interfere with these time critical processes. All connections are supervised by a watchdog, and disconnection of any of the cables to the measurement server will automatically disarm the robot and disable all program-controlled robot movements. Furthermore, the measurement server is equipped with an expansion port which is reserved for future applications. Please note that this expansion port does not have a standardized pinout, and therefore only devices provided by SPEAG can be connected. Devices from any other supplier could seriously damage the measurement server.



Picture C.7 Server for DASY 4



Picture C.8 Server for DASY 5

C.4.4 Device Holder for Phantom

The SAR in the phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source at 5mm distance, a positioning uncertainty of $\pm 0.5\text{mm}$ would produce a SAR uncertainty of $\pm 20\%$. Accurate device positioning is therefore crucial for accurate and repeatable measurements. The positions in which the devices must be measured are defined by the standards.

The DASY device holder is designed to cope with the different positions given in the standard. It has two scales for device rotation (with respect to the body axis) and device inclination (with respect to the line between the ear reference points). The rotation centers for both scales are the ear reference point (ERP). Thus the device needs no repositioning when changing the angles.

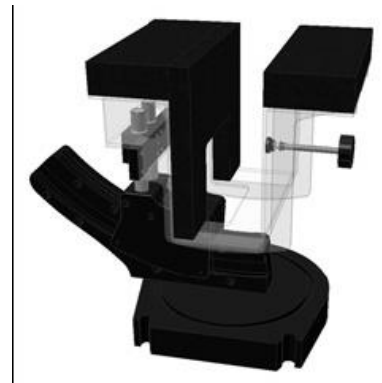
The DASY device holder is constructed of low-loss POM material having the following dielectric parameters: relative permittivity $\epsilon = 3$ and loss tangent $\delta = 0.02$. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.

<Laptop Extension Kit>

The extension is lightweight and made of POM, acrylic glass and foam. It fits easily on the upper part of the Mounting Device in place of the phone positioner. The extension is fully compatible with the Twin-SAM and ELI phantoms.



Picture C.9-1: Device Holder



Picture C.9-2: Laptop Extension Kit

C.4.5 Phantom

The SAM Twin Phantom V4.0 is constructed of a fiberglass shell integrated in a table. The shape of the shell is based on data from an anatomical study designed to represent the 90th percentile of the population. The phantom enables the dissymmetric evaluation of SAR for both left and right handed handset usage, as well as body-worn usage using the flat phantom region. Reference markings on the Phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points in the robot. The shell phantom has a 2mm shell thickness (except the ear region where shell thickness increases to 6 mm).

Shell Thickness: 2 ± 0.2 mm

Filling Volume: Approx. 25 liters

Dimensions: 810 x 1000 x 500 mm (H x L x W)

Available: Special

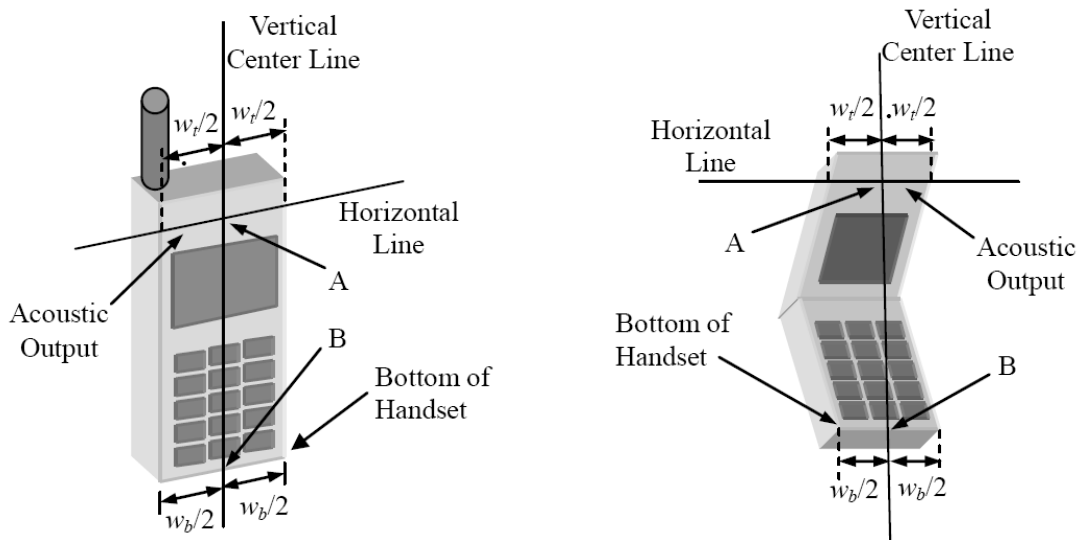


Picture C.10: SAM Twin Phantom

ANNEX D Position of the wireless device in relation to the phantom

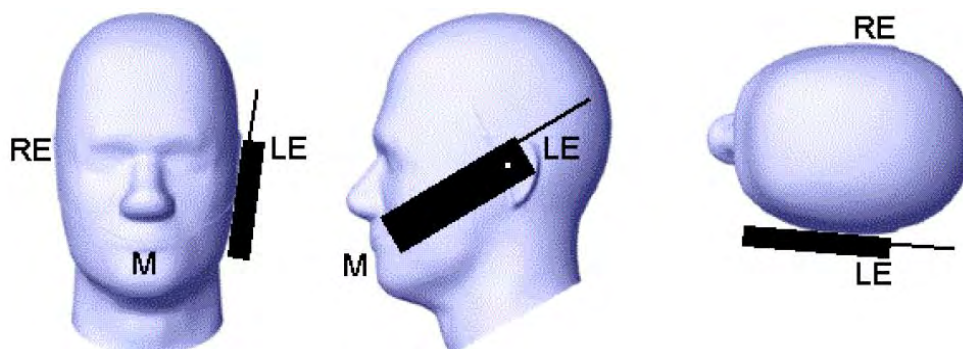
D.1 General considerations

This standard specifies two handset test positions against the head phantom – the “cheek” position and the “tilt” position.

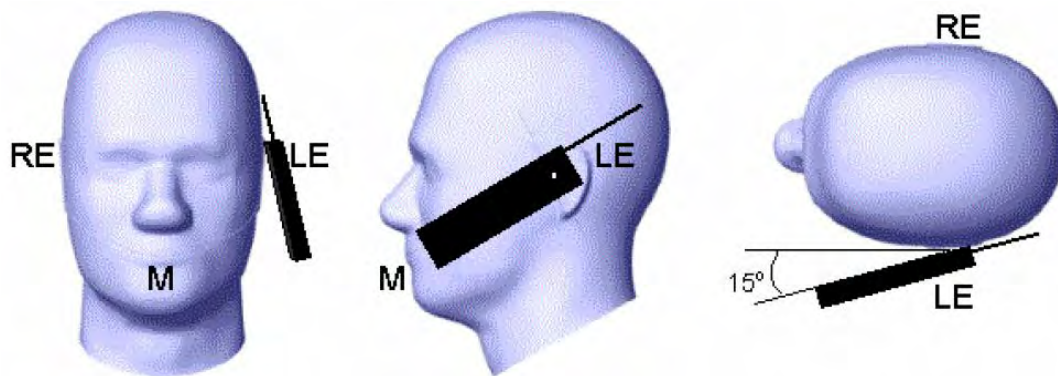


- w_t Width of the handset at the level of the acoustic
- w_b Width of the bottom of the handset
- A Midpoint of the width w_t of the handset at the level of the acoustic output
- B Midpoint of the width w_b of the bottom of the handset

Picture D.1-a Typical “fixed” case handset Picture D.1-b Typical “clam-shell” case handset



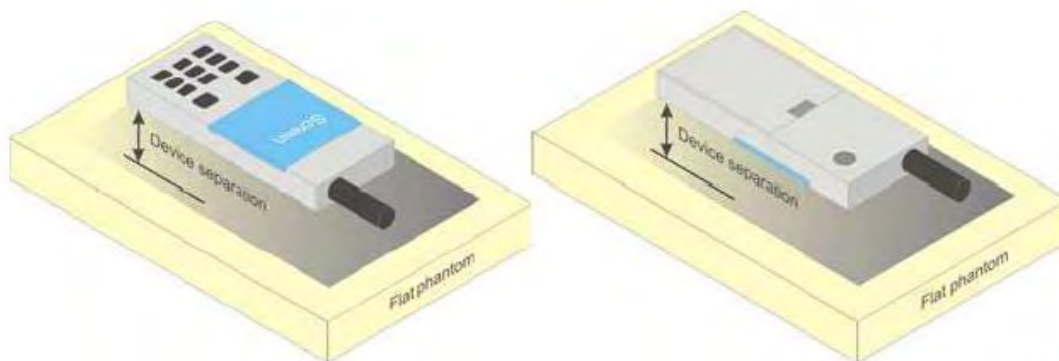
Picture D.2 Cheek position of the wireless device on the left side of SAM



Picture D.3 Tilt position of the wireless device on the left side of SAM

D.2 Body-worn device

A typical example of a body-worn device is a mobile phone, wireless enabled PDA or other battery operated wireless device with the ability to transmit while mounted on a person's body using a carry accessory approved by the wireless device manufacturer.

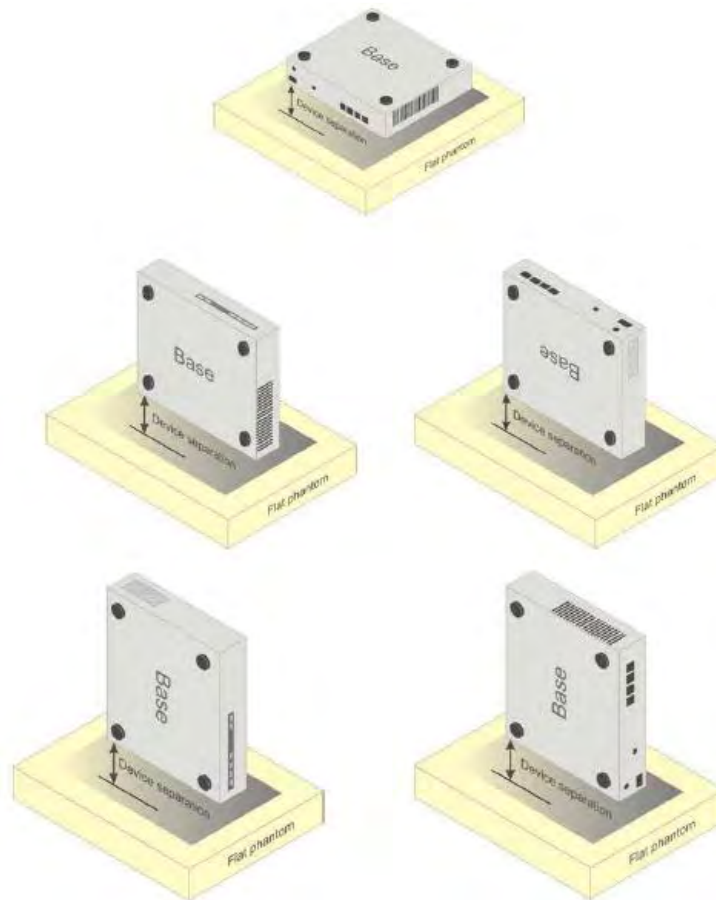


Picture D.4 Test positions for body-worn devices

D.3 Desktop device

A typical example of a desktop device is a wireless enabled desktop computer placed on a table or desk when used.

The DUT shall be positioned at the distance and in the orientation to the phantom that corresponds to the intended use as specified by the manufacturer in the user instructions. For devices that employ an external antenna with variable positions, tests shall be performed for all antenna positions specified. Picture 8.5 show positions for desktop device SAR tests. If the intended use is not specified, the device shall be tested directly against the flat phantom.



Picture D.5 Test positions for desktop devices

D.4 DUT Setup Photos



Picture D.6

ANNEX E Equivalent Media Recipes

The liquid used for the frequency range of 800-3000 MHz consisted of water, sugar, salt, preventol, glycol monobutyl and Cellulose. The liquid has been previously proven to be suited for worst-case. The Table E.1 shows the detail solution. It's satisfying the latest tissue dielectric parameters requirements proposed by the IEEE 1528 and IEC 62209.

TableE.1: Composition of the Tissue Equivalent Matter

Frequency (MHz)	835Head	835Body	1900 Head	1900 Body	2450 Head	2450 Body	5800 Head	5800 Body
Ingredients (% by weight)								
Water	41.45	52.5	55.242	69.91	58.79	72.60	65.53	65.53
Sugar	56.0	45.0	\	\	\	\	\	\
Salt	1.45	1.4	0.306	0.13	0.06	0.18	\	\
Preventol	0.1	0.1	\	\	\	\	\	\
Cellulose	1.0	1.0	\	\	\	\	\	\
Glycol Monobutyl	\	\	44.452	29.96	41.15	27.22	\	\
Diethylenglycol monohexylether	\	\	\	\	\	\	17.24	17.24
Triton X-100	\	\	\	\	\	\	17.24	17.24
Dielectric Parameters	$\epsilon=41.5$	$\epsilon=55.2$	$\epsilon=40.0$	$\epsilon=53.3$	$\epsilon=39.2$	$\epsilon=52.7$	$\epsilon=35.3$	$\epsilon=48.2$
Target Value	$\sigma=0.90$	$\sigma=0.97$	$\sigma=1.40$	$\sigma=1.52$	$\sigma=1.80$	$\sigma=1.95$	$\sigma=5.27$	$\sigma=6.00$

Note: There are a little adjustment respectively for 750, 1750, 2600, 5200, 5300 and 5600 based on the recipe of closest frequency in table E.1.

ANNEX F System Validation

The SAR system must be validated against its performance specifications before it is deployed. When SAR probes, system components or software are changed, upgraded or recalibrated, these must be validated with the SAR system(s) that operates with such components.

Table F.1: System Validation for 7548

Probe SN.	Liquid name	Validation date	Frequency point	Status (OK or Not)
7548	Head 750MHz	August.2,2022	750 MHz	OK
7548	Head 900MHz	August.2,2022	900 MHz	OK
7548	Head 1450MHz	August.2,2022	1450 MHz	OK
7548	Head 1750MHz	August.2,2022	1750 MHz	OK
7548	Head 1900MHz	August.2,2022	1900 MHz	OK
7548	Head 2000MHz	August.3,2022	2000 MHz	OK
7548	Head 2300MHz	August.3,2022	2300 MHz	OK
7548	Head 2450MHz	August.3,2022	2450 MHz	OK
7548	Head 2600MHz	August.3,2022	2600 MHz	OK
7548	Head 3300MHz	August.3,2022	3300 MHz	OK
7548	Head 3500MHz	August.3,2022	3500 MHz	OK
7548	Head 3700MHz	August.3,2022	3700 MHz	OK
7548	Head 5250MHz	August.4,2022	5250 MHz	OK
7548	Head 5600MHz	August.4,2022	5600 MHz	OK
7548	Head 5750MHz	August.4,2022	5750 MHz	OK



ANNEX G Probe Calibration Certificate

Probe 7548 Calibration Certificate



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E-mail: emf@caict.ac.cn http://www.caict.ac.cn

Client **CTTL**

Certificate No: **Z22-60260**

CALIBRATION CERTIFICATE			
Object	EX3DV4 - SN : 7548		
Calibration Procedure(s)	FF-Z11-004-02 Calibration Procedures for Dosimetric E-field Probes		
Calibration date:	August 01, 2022		
This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements(SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.			
All calibrations have been conducted in the closed laboratory facility: environment temperature(22±3)°C and humidity<70%.			
Calibration Equipment used (M&TE critical for calibration)			
Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	101919	14-Jun-22(CTTL, No.J22X04181)	Jun-23
Power sensor NRP-Z91	101547	14-Jun-22(CTTL, No.J22X04181)	Jun-23
Power sensor NRP-Z91	101548	14-Jun-22(CTTL, No.J22X04181)	Jun-23
Reference 10dBAttenuator	18N50W-10dB	20-Jan-21(CTTL, No.J21X00486)	Jan-23
Reference 20dBAttenuator	18N50W-20dB	20-Jan-21(CTTL, No.J21X00485)	Jan-23
Reference Probe EX3DV4	SN 3846	20-May-22(SPEAG, No.EX3-3846_May22)	May-23
DAE4	SN 771	20-Jan-22(SPEAG, No.DAE4-771_Jan22)	Jan-23
Secondary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
SignalGenerator MG3700A	6201052605	14-Jun-22(CTTL, No.J22X04182)	Jun-23
Network Analyzer E5071C	MY46110673	14-Jan-22(CTTL, No.J22X00406)	Jan-23
Calibrated by:	Name Yu Zongying	Function SAR Test Engineer	Signature
Reviewed by:	Name Lin Hao	Function SAR Test Engineer	Signature
Approved by:	Name Qi Dianyuan	Function SAR Project Leader	Signature
Issued: August 08, 2022			
This calibration certificate shall not be reproduced except in full without written approval of the laboratory.			



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Glossary:

TSL	tissue simulating liquid
NORM _{x,y,z}	sensitivity in free space
ConvF	sensitivity in TSL / NORM _{x,y,z}
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A,B,C,D	modulation dependent linearization parameters
Polarization Φ	Φ rotation around probe axis
Polarization θ	θ rotation around an axis that is in the plane normal to probe axis (at measurement center), $\theta=0$ is normal to probe axis

Connector Angle information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}:** Assessed for E-field polarization $\theta=0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not effect the E^2 -field uncertainty inside TSL (see below ConvF).
- NORM(f)_{x,y,z} = NORM_{x,y,z} * frequency_response** (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCP_{x,y,z}:** DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency nor media.
- PAR:** PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics.
- A_{x,y,z}; B_{x,y,z}; C_{x,y,z}; VR_{x,y,z}:** A,B,C are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters:** Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty valued are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM_{x,y,z} * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy):** in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset:** The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle:** The angle is assessed using the information gained by determining the NORM_x (no uncertainty required).

DASY/EASY – Parameters of Probe: EX3DV4 – SN:7548

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc ($k=2$)
Norm($\mu\text{V}/(\text{V}/\text{m})^2$) ^A	0.62	0.70	0.63	$\pm 10.0\%$
DCP(mV) ^B	101.7	102.0	102.0	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB $\cdot\mu\text{V}$	C	D dB	VR mV	Unc ^E ($k=2$)
0	CW	X	0.0	0.0	1.0	0.00	193.2	$\pm 2.2\%$
		Y	0.0	0.0	1.0		208.5	
		Z	0.0	0.0	1.0		192.2	

The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%.

^A The uncertainties of Norm X, Y, Z do not affect the E^2 -field uncertainty inside TSL (see Page 4).

^B Numerical linearization parameter: uncertainty not required.

^E Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

DASY/EASY – Parameters of Probe: EX3DV4 – SN:7548

Calibration Parameter Determined in Head Tissue Simulating Media

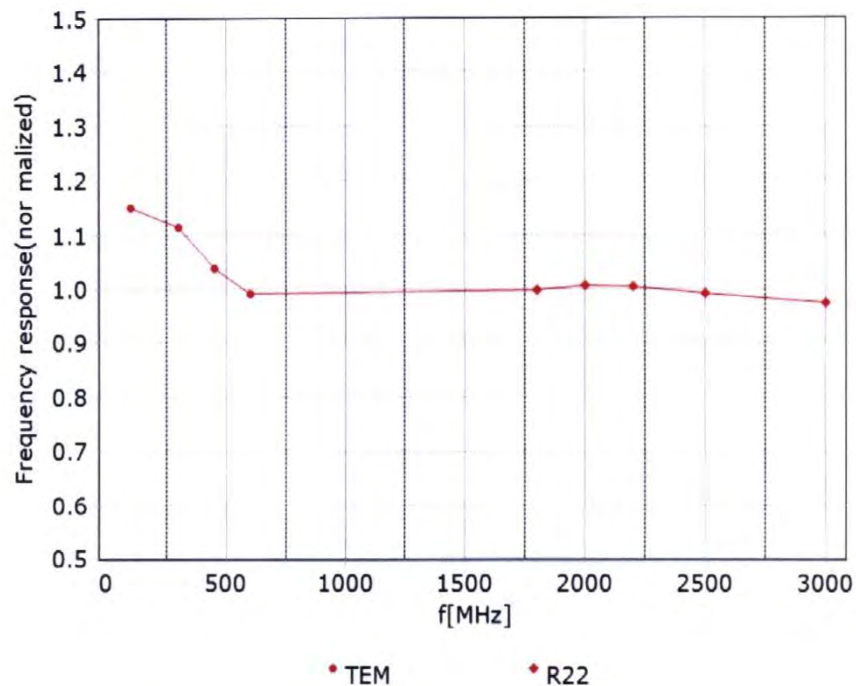
f [MHz] ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unct. (k=2)
750	41.9	0.89	10.30	10.30	10.30	0.16	1.29	±12.1%
900	41.5	0.97	9.81	9.81	9.81	0.16	1.32	±12.1%
1450	40.5	1.20	8.56	8.56	8.56	0.20	0.91	±12.1%
1750	40.1	1.37	8.13	8.13	8.13	0.22	1.00	±12.1%
1900	40.0	1.40	7.80	7.80	7.80	0.25	1.00	±12.1%
2100	39.8	1.49	7.95	7.95	7.95	0.19	1.24	±12.1%
2300	39.5	1.67	7.61	7.61	7.61	0.46	0.72	±12.1%
2450	39.2	1.80	7.32	7.32	7.32	0.50	0.72	±12.1%
2600	39.0	1.96	7.12	7.12	7.12	0.56	0.68	±12.1%
3300	38.2	2.71	6.75	6.75	6.75	0.40	0.90	±13.3%
3500	37.9	2.91	6.61	6.61	6.61	0.38	1.02	±13.3%
3700	37.7	3.12	6.41	6.41	6.41	0.35	1.07	±13.3%
3900	37.5	3.32	6.30	6.30	6.30	0.30	1.50	±13.3%
4100	37.2	3.53	6.22	6.22	6.22	0.30	1.38	±13.3%
4200	37.1	3.63	6.10	6.10	6.10	0.35	1.35	±13.3%
4400	36.9	3.84	6.00	6.00	6.00	0.35	1.35	±13.3%
4600	36.7	4.04	5.92	5.92	5.92	0.40	1.30	±13.3%
4800	36.4	4.25	5.88	5.88	5.88	0.40	1.38	±13.3%
4950	36.3	4.40	5.68	5.68	5.68	0.40	1.40	±13.3%
5250	35.9	4.71	4.98	4.98	4.98	0.45	1.35	±13.3%
5600	35.5	5.07	4.57	4.57	4.57	0.45	1.40	±13.3%
5750	35.4	5.22	4.64	4.64	4.64	0.40	1.60	±13.3%

^C Frequency validity above 300 MHz of ±100MHz only applies for DASY v4.4 and higher (Page 2), else it is restricted to ±50MHz. The uncertainty is the RSS of ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

^F At frequency below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ±10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to ±5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

^G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for the frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

Frequency Response of E-Field (TEM-Cell: ifi110 EXX, Waveguide: R22)



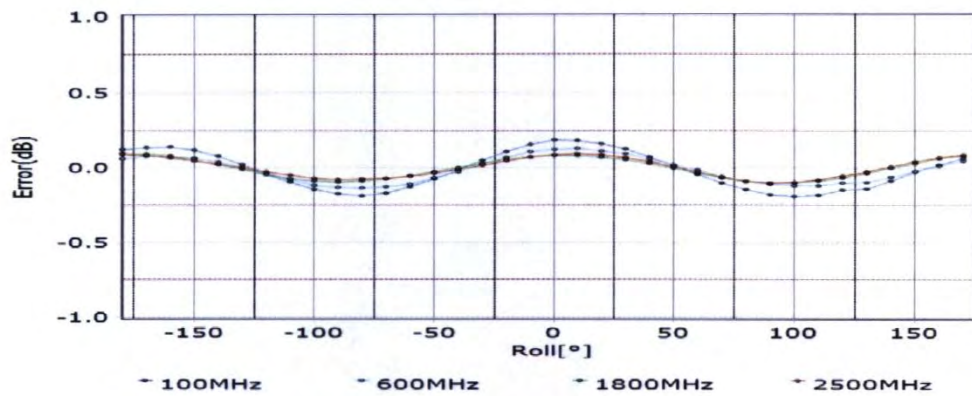
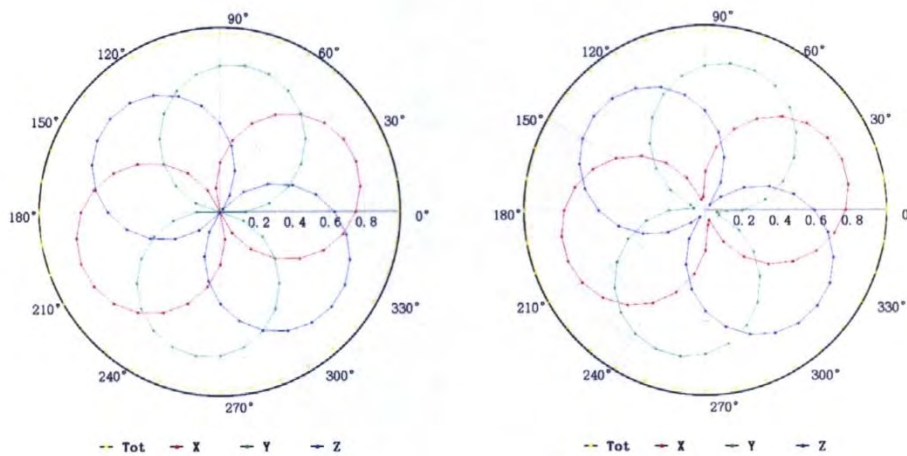
Uncertainty of Frequency Response of E-field: $\pm 7.4\%$ ($k=2$)

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Receiving Pattern (Φ), $\theta=0^\circ$

f=600 MHz, TEM

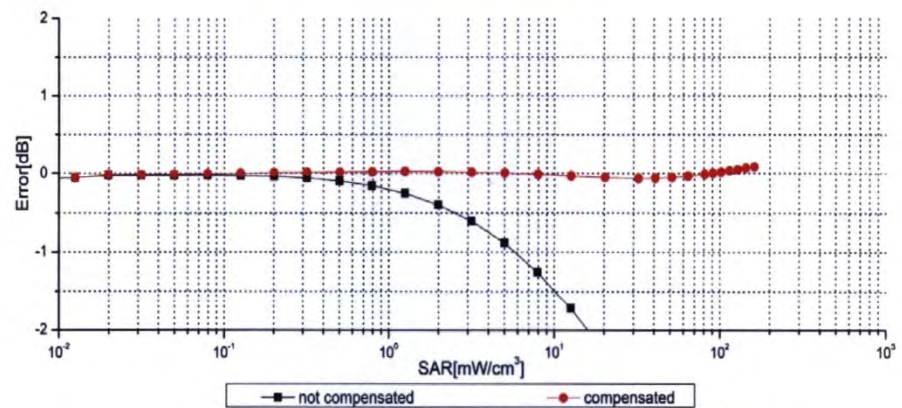
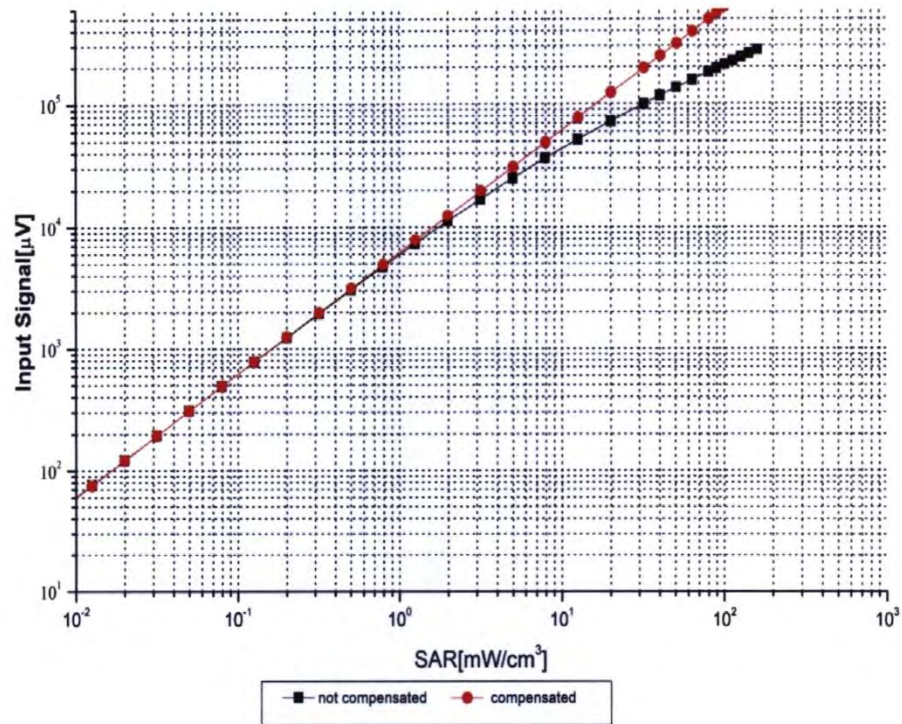
f=1800 MHz, R22



Uncertainty of Axial Isotropy Assessment: $\pm 1.2\%$ ($k=2$)

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Dynamic Range f(SAR_{head}) (TEM cell, f = 900 MHz)



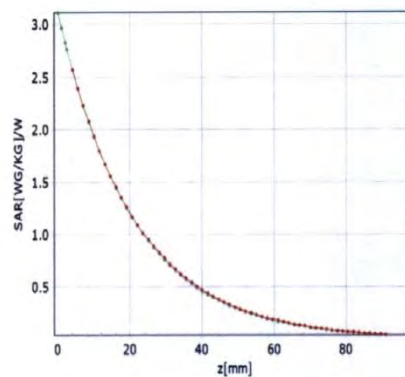
Uncertainty of Linearity Assessment: ±0.9% (k=2)

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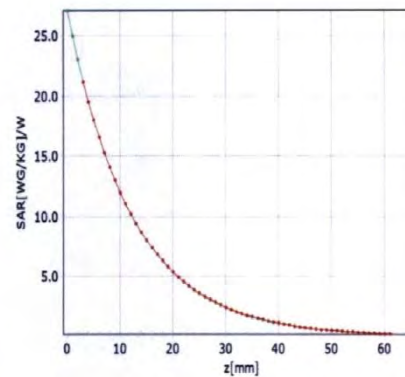
Conversion Factor Assessment

f=750 MHz,WGLS R9(H_convF)

f=1750 MHz,WGLS R22(H_convF)

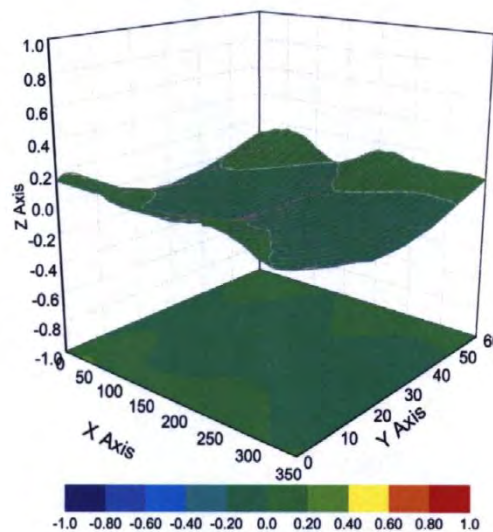


* analytical * measured



* analytical * measured

Deviation from Isotropy in Liquid



Uncertainty of Spherical Isotropy Assessment: $\pm 3.2\%$ ($k=2$)



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DASY/EASY – Parameters of Probe: EX3DV4 – SN:7548

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	146.7
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disable
Probe Overall Length	337mm
Probe Body Diameter	10mm
Tip Length	9mm
Tip Diameter	2.5mm
Probe Tip to Sensor X Calibration Point	1mm
Probe Tip to Sensor Y Calibration Point	1mm
Probe Tip to Sensor Z Calibration Point	1mm
Recommended Measurement Distance from Surface	1.4mm

ANNEX H Dipole Calibration Certificate

750 MHz Dipole Calibration Certificate

Calibration Laboratory of
Schmid & Partner
Engineering AG
 Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst
S Service suisse d'étalonnage
C Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
 The Swiss Accreditation Service is one of the signatories to the EA
 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **CTTL (Auden)**

Certificate No: **D750V3-1017_Jul22**

CALIBRATION CERTIFICATE

Object **D750V3 - SN:1017**

Calibration procedure(s) **QA CAL-05.v11**
Calibration Procedure for SAR Validation Sources between 0.7-3 GHz

Calibration date: **July 20, 2022**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
 The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	04-Apr-22 (No. 217-03525/03524)	Apr-23
Power sensor NRP-Z91	SN: 103244	04-Apr-22 (No. 217-03524)	Apr-23
Power sensor NRP-Z91	SN: 103245	04-Apr-22 (No. 217-03525)	Apr-23
Reference 20 dB Attenuator	SN: BH9394 (20k)	04-Apr-22 (No. 217-03527)	Apr-23
Type-N mismatch combination	SN: 310982 / 06327	04-Apr-22 (No. 217-03528)	Apr-23
Reference Probe EX3DV4	SN: 7349	31-Dec-21 (No. EX3-7349_Dec21)	Dec-22
DAE4	SN: 601	02-May-22 (No. DAE4-601_May22)	May-23
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB39512475	30-Oct-14 (in house check Oct-20)	In house check: Oct-22
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
Power sensor HP 8481A	SN: MY41093315	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-20)	In house check: Oct-22
Network Analyzer Agilent E8358A	SN: US41080477	31-Mar-14 (in house check Oct-20)	In house check: Oct-22

Calibrated by:	Name	Function	Signature
	Aidonia Georgiadou	Laboratory Technician	
Approved by:	Sven Kühn	Technical Manager	

Issued: July 22, 2022

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